FREIGHT TRAFFIC ISSUE: PFE—A HEALTHY 60-YEAR-OLD p. 33

JANUARY 30, 1967

RAILWAY AGE

THE TRANSPORTATION WEEKLY

McCARTNEY LIBRARY JAN 30
GENEVA COLLEGE

HOW RAILS FIT INTO JOHNSON & JOHNSON'S DISTRIBUTION SYSTEM

p. 28C

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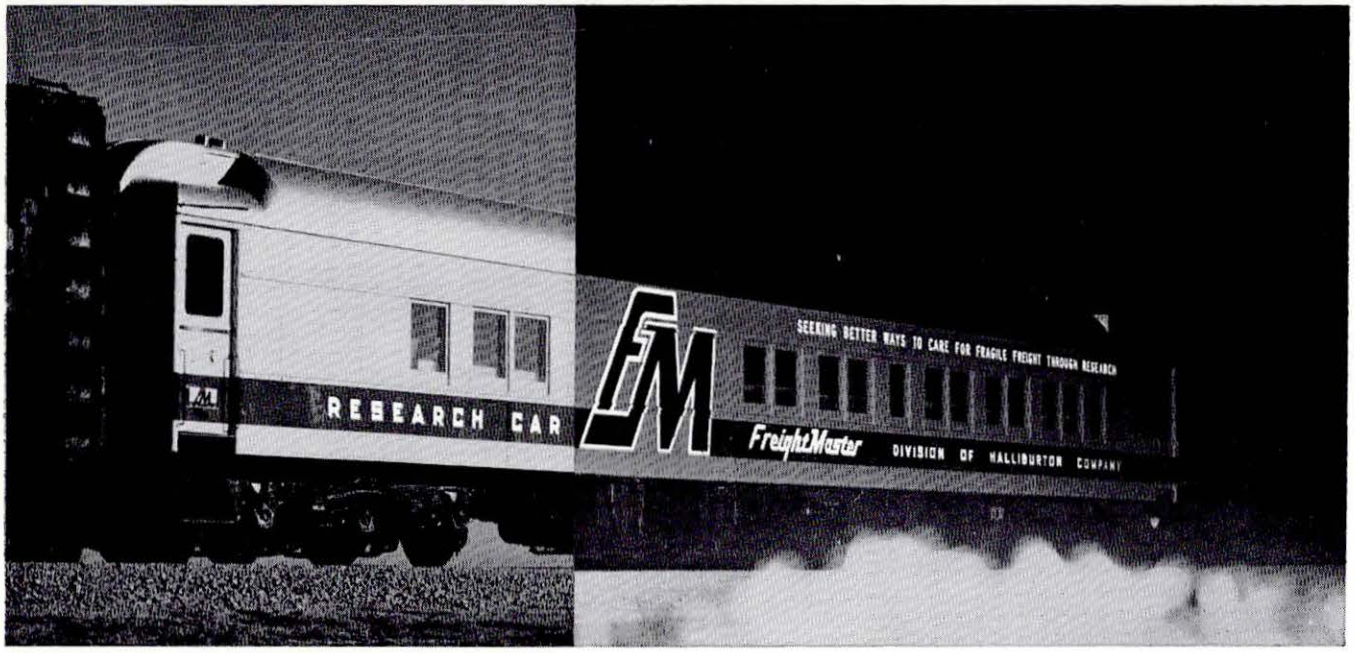
McCARTNEY LIBRARY
GENEVA COLLEGE
BEAVER FALLS PA 15010

SHIPPERS WANT MORE WORKHORSE CARS

p. 31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DIVISION OF HALLIBURTON COMPANY

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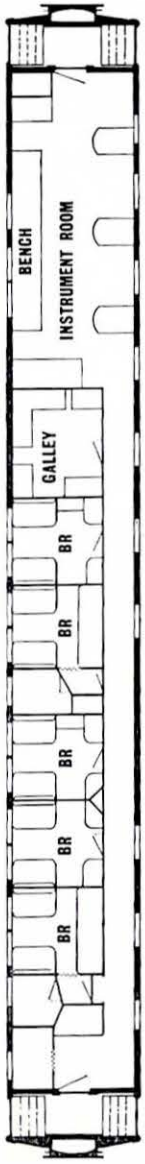

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Research is no project-come-lately at FreightMaster. It began nearly 50,000 FreightMasters ago, and continues at our permanent Test Track installation and in two mobile Test Vans. It has already resulted in a cushioning system that helps protect cargo and car, and needs virtually no maintenance.

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Erie Lackawanna *Railroad Company*

TO OUR SHIPPER FRIENDS:

MANY THANKS!...for your continued and encouraging support which has enabled Erie Lackawanna to earn a profit in 1966.

We fully understand that the welfare of our Company is based primarily upon the quality of service rendered to those who favor us with their business. This we consider to be our most important responsibility. You may be sure we will strive to fulfill our obligation in a manner that will merit your continued confidence and support.

So, again....MANY THANKS!....and all good wishes for a Happy and Abundant 1967.

Sincerely,

ERIE LACKAWANNA RAILROAD

The Friendly Service Route

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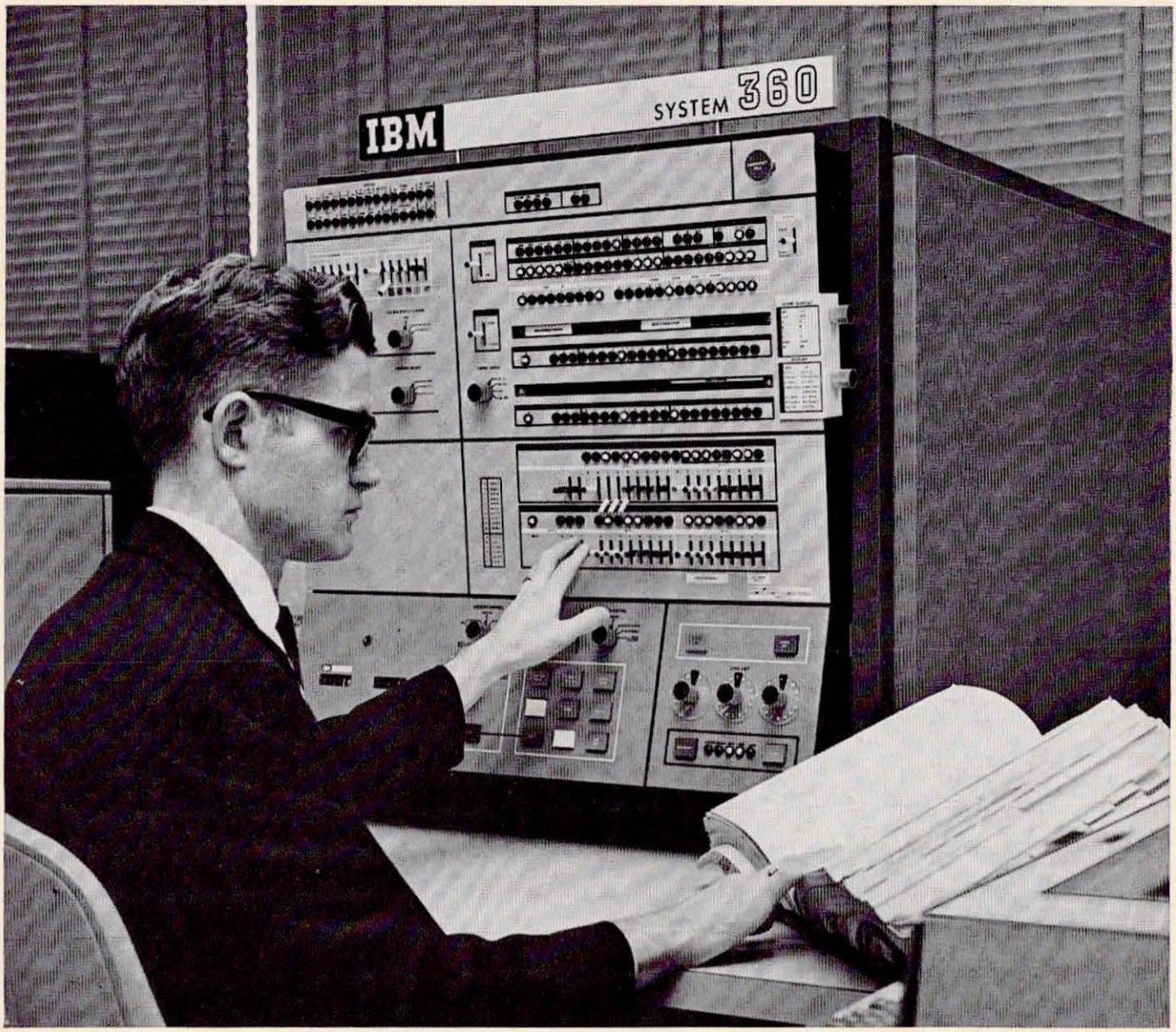
L&N's direct inquiry service for shippers was first across the nation!

Now... it's even newer and faster!



F-1

Faster, more modern computers have been installed at L&N's Data Processing Center to keep ahead of increasing shipper use of the exclusive Data/Spot program. L&N, first in the nation to offer direct long distance car tracing, now provides ultra-speed response with a newer, faster system.

"Years-ahead Railroading" describes L&N service today. You will find progressive concepts of dynamic distribution hard at work in every segment of L&N's service to shippers. Your L&N man will demonstrate how these methods can speed your shipments . . . save you money. He is as near as your telephone.

L&N
LOUISVILLE AND NASHVILLE RAILROAD

Circle 5 on reader service card

RAILWAY AGE

January 30, 1967 • Vol. 162, No. 4

THIS WEEK

28C How J&J uses railroads

Cleanliness and damage prevention are vital in the carload shipments of the manufacturer's broad product line.

31 Shippers want box cars most of all

The "plain old workhorses" are most wanted, the Traffic Poll indicates. Next come special boxes, covered hoppers and flat cars.

33 PFE challenges the future

The $237 million spent so far in the Sixties is evidence that PFE thinks its perishable-hauling business will continue to grow.

38 Research pays off for a newcomer

Solving various railroad problems has been a profitable venture for the Halliburton Co.'s FreightMaster Division.

42 Reading makes a Bee-Line for profits

The road's Bee-Line runs prove that shippers can get prompt short-haul service that leaves a profit for the carrier.

66 Viewpoint—Meeting the challenge of change

Railroads have responded to the changing demands of the transportation marketplace, but not always fast enough.

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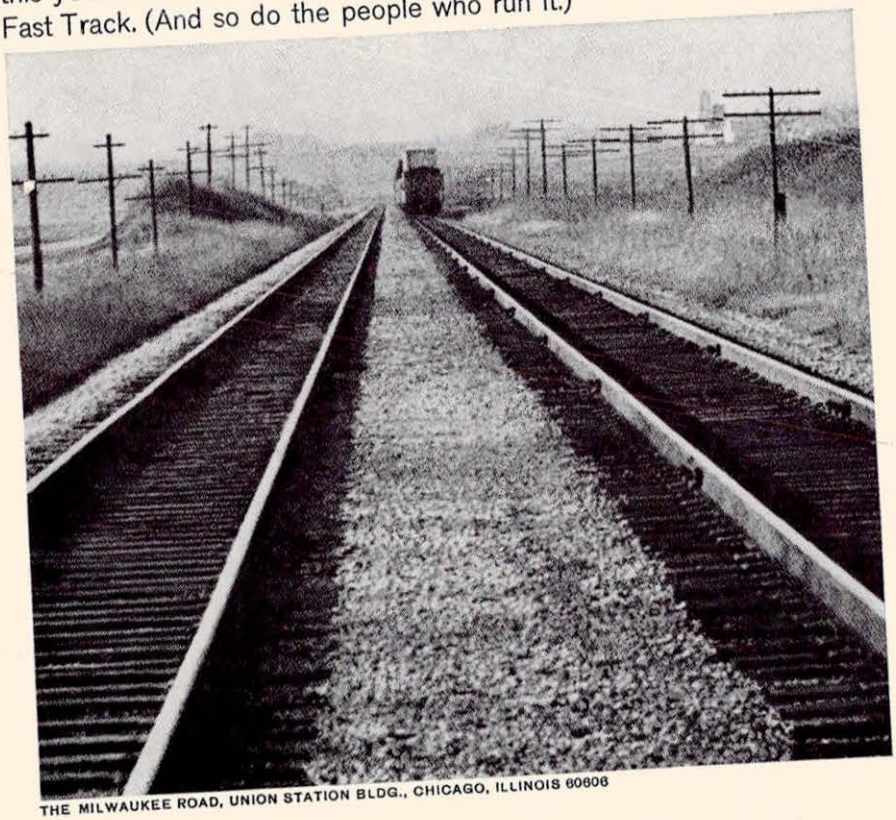
The Milwaukee moves. 30 seconds ago one of our daily freights rocketed over these rails, on a schedule 26 hours faster than formerly. Faster than anything on wheels to the Pacific Northwest. The Milwaukee moves. Our piggyback volume is growing at a rate three times the industry average. The Milwaukee moves. We expect to carry 18,000 more automobiles this year than last. The Milwaukee Road moves on the Fast Track. (And so do the people who run it.)



THE MILWAUKEE ROAD, UNION STATION BLDG., CHICAGO, ILLINOIS 60606

Get on the Fast Track!

THE MILWAUKEE ROAD

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SHORT AND SIGNIFICANT

AAR will resume advertising campaign

Ads promoting the image of the railroad industry as a whole will soon be re-appearing in national magazines—possibly as early as April. Directors of the Association of American Railroads have authorized a resumption of the AAR's advertising program on a limited basis (although how limited has not been spelled out). In general magazines, the ads will appear in four colors and will feature large photographs emphasizing the role played by modern equipment and modern techniques in railroading today. While six special ads were sponsored by the AAR in 1965, the association's general advertising campaign has been suspended since 1960.

●

Final tally: car orders totaled 102,342 in '66

A late, unexpected surge of business in December pushed new-freight-car orders for 1966 to a total of 102,342—about 5,000 more than earlier reports had indicated. Deliveries in 1966, according to the American Railway Car Institute, totaled 89,883. As of Jan. 1, 1967, the backlog of cars on order and undelivered came to 56,618—compared with 44,297 on the corresponding date a year ago. Big surprise in the ARCI's latest report was the number of cars ordered in December —8,378. Some industry experts had predicted that December orders would be no more than 3,000 as a result of suspension of the investment tax credit.

●

N&W's very profitable (almost $100 million) 1966

Norfolk & Western's profits for 1966 peaked close to the $100 million mark, the railroad reported last week in releasing figures on the past year's record performance. Net income amounted to $97.8 million, or $10.61 a share, a 10.5% hike over the 1965 showing of $9.60 a share on income of $90.1 million. Substantial increases in coal and merchandise traffic helped boost the road's operating revenues to $613.9 million, up from $592.5 million in '65. Coal and coke revenues accounted for 39.2% of total revenues; merchandise freight, 55.1%; and mail, express and passenger and all other income, 5.7%. N&W's operating ratio was up—to 66.9 compared with 65.9 in the previous year—an increase attributed to wage hikes.

●

Equipment leasing set a record in 1966

The need for many railroads to continue to modernize facilities despite tight money prompted a number of roads to increase their leasing of equipment last year. Brooks Walker, Jr., president of U.S. Leasing Corp., said the industry leased a record $53.8 million worth of equipment, 7% more than in '65. The figure does not include autos, trucks, rented computers, or real estate. "While some of the industry's companies cut back on capital expenditures because of the high cost of borrowing and the reduction in available funds, many others reacted by accelerating introduction of cost-cutting equipment," Walker said. "Still others could not cut back on going programs, while others were faced with the need to meet competitive pressures. All these factors produced a record lease volume by railroad industry companies in 1966." He said that leasing in 1967 will also hit a high level.

●

December rail employment

Railroads had 626,357 employees in December, down 0.96% from the total work force in December 1965. There was an increase in only two employee groups—executives, officials and staff assistants, up 4.22% to 15,557—and transportation (train and engine service) up 1.18% to 171,-517 employees.

MONDAY MORNING REPORT

LBJ tries again for user charges

The new Secretary of Transportation, Alan S. Boyd, said recently that Presidential calls for waterway user charges have become a "well-established trend." Boyd noted that every Administration has been asking for them since 1949. Congress' failure to respond is also a well-established trend, but President Johnson is trying again. His annual Budget Message, which went to Congress last week, recommends once more the institution of charges for use of domestic waterways, and new and increased charges for use of publicly-provided highway and air-transport facilities.

Waterway subsidies will remain firm

With the exception of those on the international St. Lawrence Seaway, there are now no waterway user charges in this country. Present indications are that Congress will not change that situation in the forseeable future. It is more likely to forestall increases in St. Lawrence tolls, which are required by present law. Neither are LBJ's proposals for increased highway user charges apt to get anywhere this year, but something might be done about his proposals as to airway user charges.

Airway-charge pact has a chance

The latter are given some chance because they reflect the compromise worked out last year and accepted by air carriers—but not by other aviation interests. The compromise would substitute a 2% tax on air-freight bills for fuel taxes now paid by the air lines. It would also leave the air-fare tax at 5%. The net increase in annual costs to the air lines would be about $3 million—the difference between a $9 million yield from the freight-bill tax and the $6 million loss from repeal of the fuel levies. Meanwhile, general aviation would be subjected to increased fuel levies, the only type of user charge it now pays. LBJ's recommendation here is unchanged. It still proposes to increase the tax on aviation gasoline to 4 cents per gallon, from 2 cents, and to levy a new 4-cents-per-gallon tax on jet fuel. Naturally, general aviation interests are unhappy about this. Despite their opposition, however, the compromise proposal looked like a winner for a while last year—until the House Committee on Ways and Means got preoccupied with the act which suspended the 7% investment credit. Although the compromise proposal has an earlier start this year, it is faced again with a like hurdle of committee preoccupation.

Investment credit revival, income tax plan to fore

The preoccupation will be with the drive of industry, including the raliroads, to make sure that the investment credit's suspension period ends at the close of this year, as now provided. This credit is an income-tax arrangement which provides generally for cutting tax liability by 7% of the cost of new equipment or other facilities. It is of major interest to the railroads. They used it in 1965 to get tax credits totaling $51 million. Another priority matter before the Ways and Means Committee this year will be President Johnson's proposed 6% surcharge on corporate and personal income taxes. Thus the air-way user-charge compromise could easily get shunted aside again.

Waterway proposal still two cents per gallon of fuel

The President's waterway-charge proposal, which is expected to maintain its record of getting nowhere, is unchanged—2 cents per gallon on vessel fuel. The estimated annual yield is $7 million. The Budget Message did not spell out LBJ's proposals as to highway user charges. Presumably, however, these, too, are like previous proposals.

LEHIGH VALLEY SOLVES TEMPERATURE CONTROL PROBLEMS

John F. Nash, President and General Manager of the Lehigh Valley Railroad . . .

in commenting on his new line of white "grocery cars" and their contribution in improved service to shippers, singled out temperature control advancements as a prime factor.

"The special Landreth insulation helps make these new cars special for our shippers," he said. "They have proven themselves to be ideal for grocery service or the hauling of canned goods and other food products that are highly sensitive to extremes of heat and cold. Without them, we might not be in the grocery business. With them, we are not only filling the critical needs of our shippers in an unusually effective way, but we are also generating extra traffic for the railroad. The growing demand for this particular type of car with its combination of polyurethane foam and fiberglas panels proves that it doesn't take long for news of a top performing, shipper-oriented car to get around."

Take advantage of Landreth's engineering and research staff and facilities. The Landreth System offers you specialists who can engineer and design the proper insulating materials to suit your specific needs.

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Bruce Dura-Wood lasts longer

AND SUPPORTS WHEEL LOADS UP TO 82,500 POUNDS

Many leading Class I railroads have used Dura-Wood for years. They report it far outlasts ordinary flat-grain vehicle-grade pine, fir and oak floors in freight cars. In some cases the ratio is 6 to 1. Special tests in the engineering laboratory of a leading university have proven Dura-Wood capable of sustaining lift truck wheel loads up to 82,500 pounds. Now is the time to reserve your share of Dura-Wood for 1967. Available in lengths, thicknesses and machining as specified. Call or write for full details.

Why Leading Railroads specify Dura-Wood

Dura-Wood is laminated edge-grain oak, pre-cut to size, easy to install. It gives a smooth end-to-end surface and provides better cargo protection (no shrinking, no gapping, no breakthrough).

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Bruce DURA-WOOD Freight Car Flooring

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WEEK AT A GLANCE

ICC still wants inter-modal route power

The ICC has made eight legislative recommendations to Congress, including a call for Commission power to require the establishment of through routes and joint rates between truckers, and also between truckers and railroads, express companies and water carriers. The Commission also recommended that the Interstate Commerce Act's Section 22 be amended to restrict the amount of free or reduced-rate transportation which may be performed for the government, and that the Act's so-called agricultural-cooperative exemption be tightened to minimize the competition with which these unregulated co-ops now confront common carriers. The other five Commission proposals call for easing the Act's valuation-reporting requirements, more power to suspend motor carrier certificates or permits for failure to comply with Commission rules, authority to exempt relatively unimportant motor carrier operations from federal regulation, liberalized arrangements for pooling by household goods truckers, and more Commission power to delegate matters to its staff. The railroads, of course, will continue their opposition to giving the Commission power to require them to establish joint rates and through routes with truckers. It has long been the railroad position that the soundest approach to inter-modal coordination is diversification. That means freedom for any mode to operate other modes.

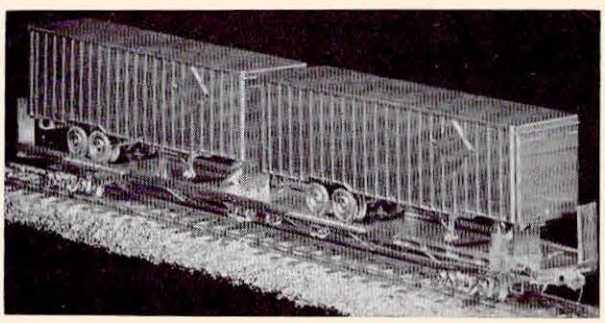
Railroads will also oppose tightening Section 22, which now provides the same type of rate-making freedom as to government traffic which they seek generally. The Commission's proposal here is to confine the performance of regulated transportation for the government at free or reduced rates to periods of war or national emergency, and to permit the performance at any time of only that transportation which is free of regulation under the Act's agricultural and bulk commodity exemptions. These, in turn, apply to truck transportation of farm and fishery products and to water transportation of commodities in bulk.

Ryan Award announced by Rail-Trailer

There's going to be a new trophy on the transportation scene—one dedicated to transportation in its broadest sense. Beginning in '67, The Rail-Trailer Company will present an annual Eugene F. Ryan Award to "the individual in the transportation industry who has done the most to advance the growth, development or concept of intermodal transport."

Rail-Trailer intends to make the award a two-fold thing. There will be the tangible reward, a silver flat car carrying two trailers. And there will also be a scholarship grant for a student designated by the recipient of the award. Plans call for the scholarship to be a basic $4,000, or $5,000 if the student elects to major in a transportation-related field.

Ryan, founder and president of Rail-Trailer, says the award is designed "to recognize and honor those individuals in transportation who have stimulated better utilization of our resources. It will be given not only as a reward for services performed in behalf of the industry but also as a stimulus toward further progress. Piggyback has made unbelievable



strides in development of methods and equipment and in better utilization of available equipment to speed the flow of goods. Now, stimulation must be applied to bring into the transportation industry more young people, with their vigor toward accepting challenge."

Ryan should know about piggyback and challenges. Since the years immediately following World War II, he's been deeply involved in almost all phases of TOFC development. He formed Rail-Trailer in 1952.

The '67 Exposition: A Lesson in adaptability

Railroads are noted for their ability to bounce back from disaster—and both railroads and the supply industry have shown once again how its done in their quick recovery from the fire that wiped out large chunks of the planning for the 1967 American Railway Progress Exposition. Chicago's lakefront exposition hall, McCormick Place, was burned out early on the morning of Jan. 16. But by the afternoon of the same day, while firemen were still pouring water on the ruins, Exposition planners had an alternate site lined up. The new site was confirmed two days later and then finally approved by the Combined Railway Suppliers on the following day. So the '67 Exposition is very much in business—Oct. 8-13, at Chicago's International Amphitheater. Track exhibits are planned for Illinois Central's 31st St. yards.

Finding a new location for the indoor exhibits was the biggest problem in the wake of the fire—but it was far from being the only one. About two dozen railroad and rail-oriented organizations will be meeting during Exposition week—and many of them had contracted for meeting-room space in McCormick Place. Within a week after the fire, just about everybody was relocated—either for-sure or tentatively. It's now expected that some organizations will be taking meeting space at the Amphitheater, and some will be setting up shop in downtown Chicago hotels.

As for vital statistics on the new exhibit site, the Amphitheater has 555,000 square feet of exhibit space; it has a rail siding which extends into the main exhibit hall; floor load on the main floor is rated at 1,000 pounds per square feet. ARPE exhibits will be centered in two halls, Exposition Hall and Donovan Hall, with a combined area of 300,000 square feet of exhibit space, of which about 60% will be usable.

GUS WELTY'S LINES ON LABOR

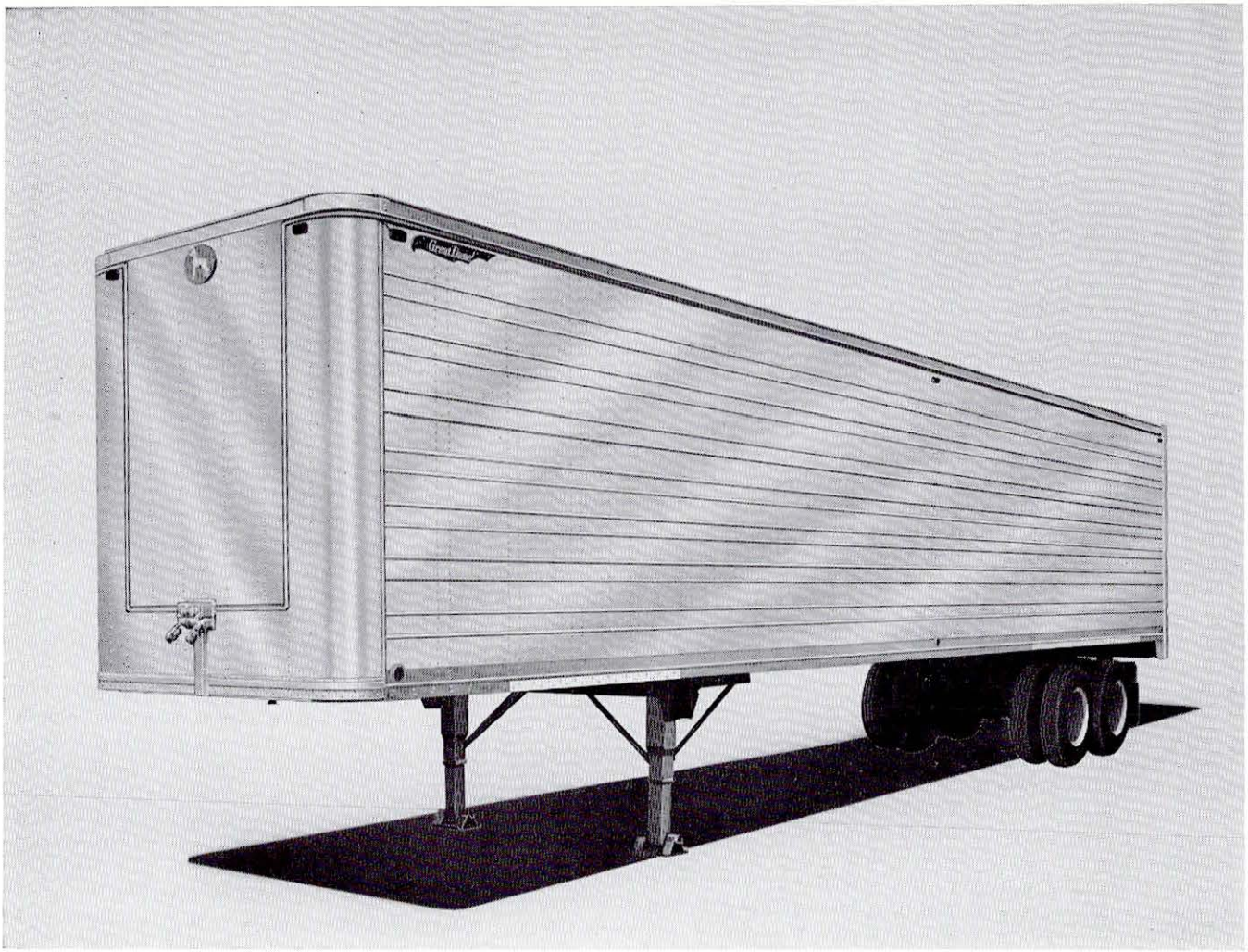
WELTY

IN THE GIVE-AND-TAKE of union-management relations on individual properties, the bad often seems to outweigh the good. But maybe it only seems that way. Maybe the depressing factors get too much attention, and the exhilarating ones too little. And maybe this is why there's always an extra touch of pleasure in being able to report on cooperative efforts for the benefit of all concerned—cooperative efforts such as those being made by Reading and the operating brotherhoods (see page 42). The Reading story is not a complicated one. The railroad had a competitive problem, and an idea of how to attack it. Management sketched out the plan for the brotherhoods, the general chairman saw the merit in it—and agreement followed. As Reading President C. E. Bertrand puts it, both sides recognized the importance of creating new services that would mean more revenue for the company and more employment for labor.

FROM THE UNION STANDPOINT, many elements had to be figured. Reading's proposal would provide new jobs. It would permit crew members to earn extra income without forcing them to spend an inordinate amount of time away from home. It would, hopefully, boost the railroad's revenues and income and, therefore, help make Reading a better place to work. At the same time, however, the plan involved brotherhood concessions in a couple of areas where concessions have come hard. Reading wanted to operate the new service with short crews—one member each from the Brotherhood of Locomotive Engineers, the Brotherhood of Railroad Trainmen and the Order of Railway Conductors & Brakemen. The railroad also proposed that crews perform both road and yard work and that they run through points where changes in the train crews ordinarily would be required.

THE UNIONS WENT ALONG. Says Bertrand: "We had excellent cooperation from our organizations . . . The general chairmen with whom we worked out the agreements deserve credit for their farsighted attitude." There were concessions on both sides, and give-and-take on both sides. But the agreements were signed, and Reading's new "Bee-Line Service" is a going thing.

IT'S POSSIBLE that some general chairmen might be appalled by such goings-on. It's true that the attitude of Reading's union people is not that of the general chairman who thinks his efficiency and his value to the organization are measured by the number of Section 6 notices he serves. But the attitudes expressed by both management and union representatives in the Reading negotiations offer far more long-range hope for employment stability and earnings improvement. And aren't those major goals of good union representatives?



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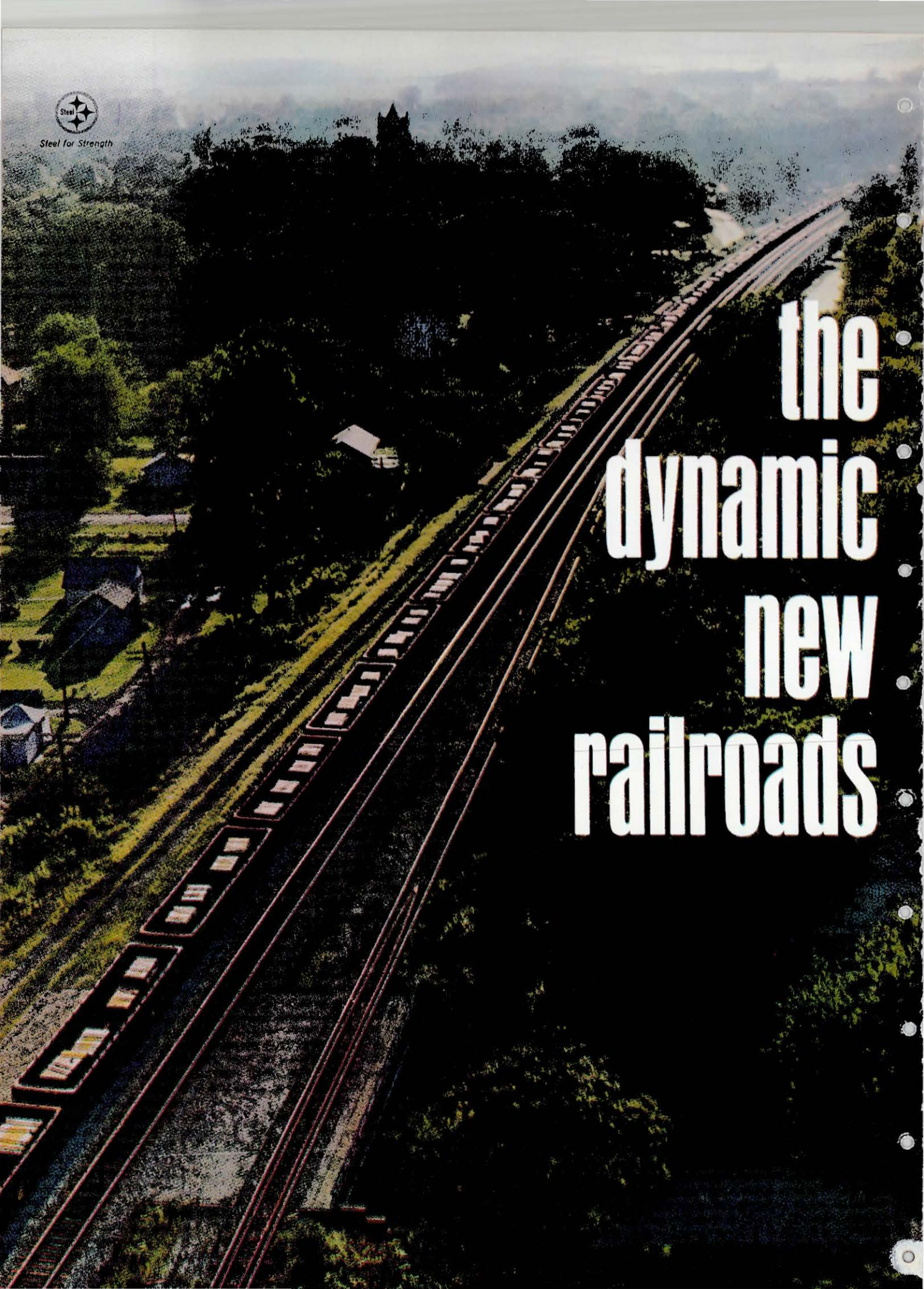
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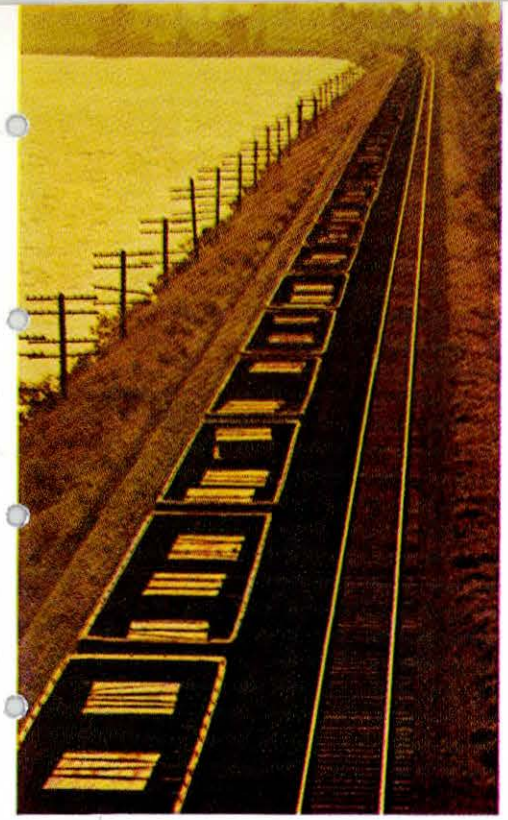
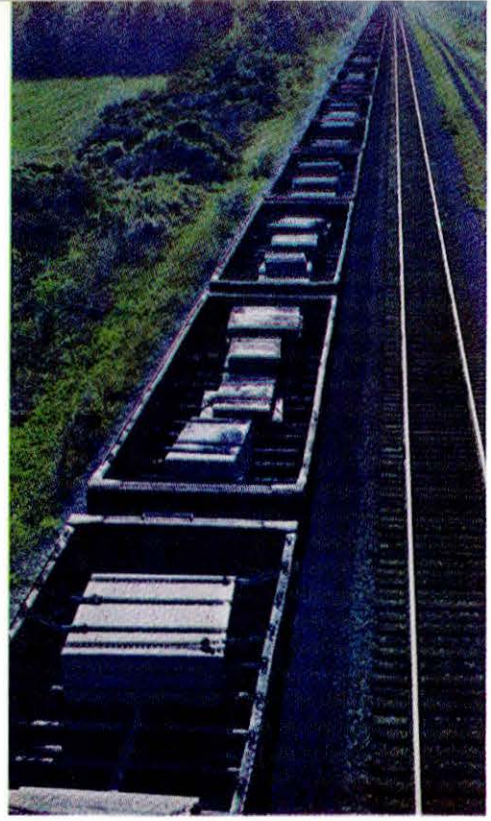
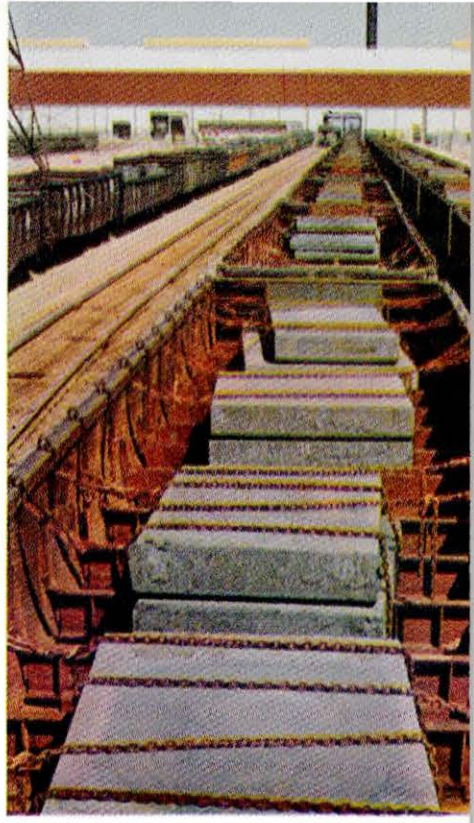
the dynamic new railroads







A railroad that became part of a 500-mile production line

A giant new steel plant at Burns Harbor, Indiana, requires steel slabs—lots of them—as raw material for its finishing mills. But the slabs have to be supplied by another plant 500 miles to the east. Because they're needed in a steady stream, the slabs have to be shipped hot—as hot as 800 degrees.

At the outset, several questions arose. Could these slabs be shipped by railroad, without damage to car trucks or brake equipment? Without endangering flammable wayside structures? Or adjacent passenger trains?

In tune with the spirit of the Dynamic New Railroads, the New York Central tackled the problems and came up with a ringing "yes". And now, every other day, a solid unit train of 80 to 100 cars feeds thousands of tons of hot steel slabs directly from the eastern plant into the rolling mills at Burns Harbor, Indiana—virtually making the railroad a part of a 500-mile production line.

Bold, creative railroading! . . . typical of the new verve and vitality that are coursing through our 212,000-mile rail network today.

Bethlehem's role in railroading is anything but that of spectator. We are a major supplier of the steel freight cars, steel rails, and other steel products that help to keep this essential industry moving. And, as you may have guessed, the two steel mills mentioned above are both Bethlehem plants.

BETHLEHEM STEEL

BETHLEHEM STEEL

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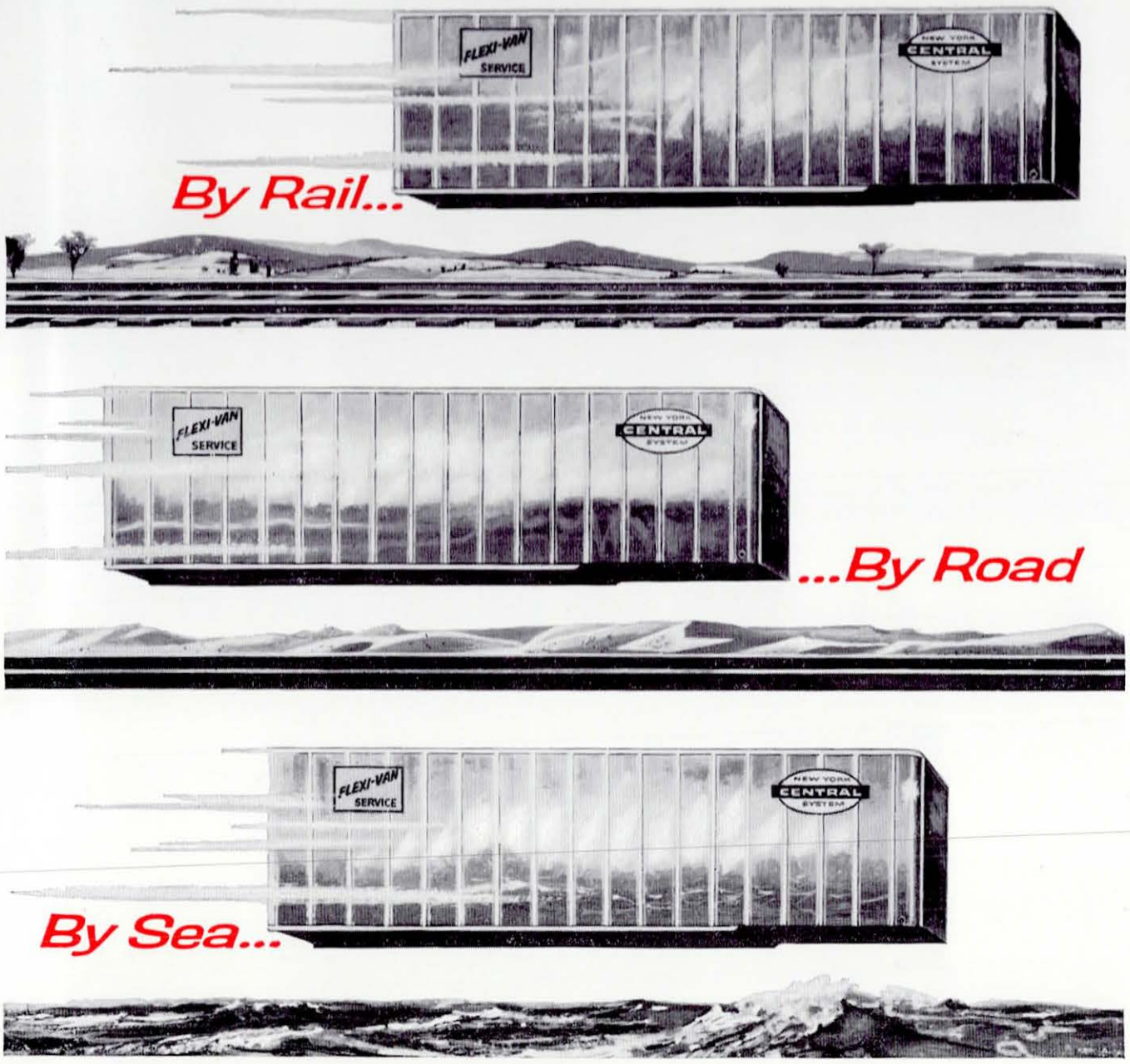


Here's the container that can solve your shipping problems today! New York Central's Flexi-Van

No matter what you ship or where you ship it, Flexi-Van can work to your advantage. This versatile container delivers from door-to-door, even if either door is miles from a railway terminal. Or even overseas.

Flexi-Van saves packing costs. Practically eliminates breakage and pilferage. Shippers benefited from Flexi-Van so much that loadings soared to new highs in 1965 and are setting records again this year.

NEW YORK CENTRAL SYSTEM

ROAD TO THE FUTURE

Circle 6 on reader service card

Fruehauf Couplable Containers don't nose-dive when properly loaded and unloaded—here's why!

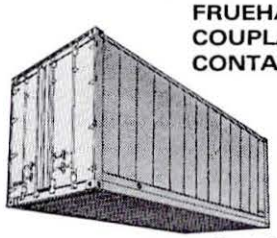
Exclusive, standard equipment on Fruehauf's Couplable Container System are king-pin-activated, retractable supports which are positioned far enough forward to safely eliminate the nose-diving problem.

For a 36″ standard king pin location, the supports are positioned, when uncoupled, at 56″ for a single axle tractor and 80″ for a tandem tractor.

Support legs can be readily raised or lowered to accommodate different tractor heights. The sliding king pin automatically actuates the entire support assembly, folding it up completely out of the way, above the bottom of the frame.

Standard Fruehauf Couplable Containers adapt to every kind of shipping problem—travel separately as 20-foot containers or trailers, as doubles, or couple together as 40-footers for road, rail, sea or air. Your Fruehauf representative has all the facts. See him soon, or write **Fruehauf Division, Fruehauf Corporation, 10942 Harper Avenue, Detroit, Michigan 48232.**

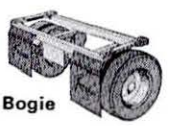
FRUEHAUF COUPLABLE CONTAINER SYSTEM



Container

With the components that make up Fruehauf's Couplable Container System, you have a flexible container that's ready for a crosstown hop or for world travel by sea, rail or air transport.

Container Chassis



Bogie

FRUEHAUF CONTAINERS
Warehousing in Motion

Leadership in ENGINEERED TRANSPORTATION since 1914

Circle 38 on reader service card

The way Mr. Pullman felt about passengers, Hydroframe® cushioning* feels about freight.

It makes sense that Pullman-Standard would come up with the finest cushioning protection for rail shipments. And we have. We built a hydraulic cushioning unit and put it in the center of the car—where it does the most good. Others have, too. But, we discovered how to give it maximum absorption. Then we hermetically sealed it to insure peak performance, day in and day out. Nobody else has. That's why if you want to ship first class, nothing can give it to you but the Hydroframe. People never had it so soft.

Pullman-Standard

WORLD'S LARGEST RAIL CAR MAKER

*Covered by U.S. Patent 3,003,436. Other patents pending.

Photographed in a private railroad car depicting the early Pullman Car era.

PS

A Division of Pullman Incorporated

200 South Michigan Avenue, Chicago, Illinois 60604

Every day we add a little something to aluminum/railroad experience.

Like a couple of 92-car aluminum unit trains, for example. And 36 more cars to grow on. We helped design them. Helped build them. Supplied the aluminum plate and extrusions for them.

Good for us, sure. But good for you, too. Because along the way, we added to the specialized knowledge and equipment that's helped solve many a freight-hauling problem. And helped build many a tank, covered hopper and open-top hopper car.

So if you're considering a unit train operation, contact us. We'll pass along our experience. There's one small catch. You may have to listen to a few dozen practical reasons for using Dow aluminum. Write The Dow Chemical Company, Metal Products Department, Midland, Michigan 48640.

DOW

George Defiel says fly with me and you'll land in paydirt.

Who does he think he is?

He's one of the fast-moving wheels on the Burlington Railroad.

"Wings" Defiel doesn't know how to fly.

But he does know how to get you around to a lot of choice acreage fast. In the air.

If you're looking for a plant site, our Director of Industrial Development will be glad to give you—or your executive committee—a tour in Burlington's speedy new Gulfstream.

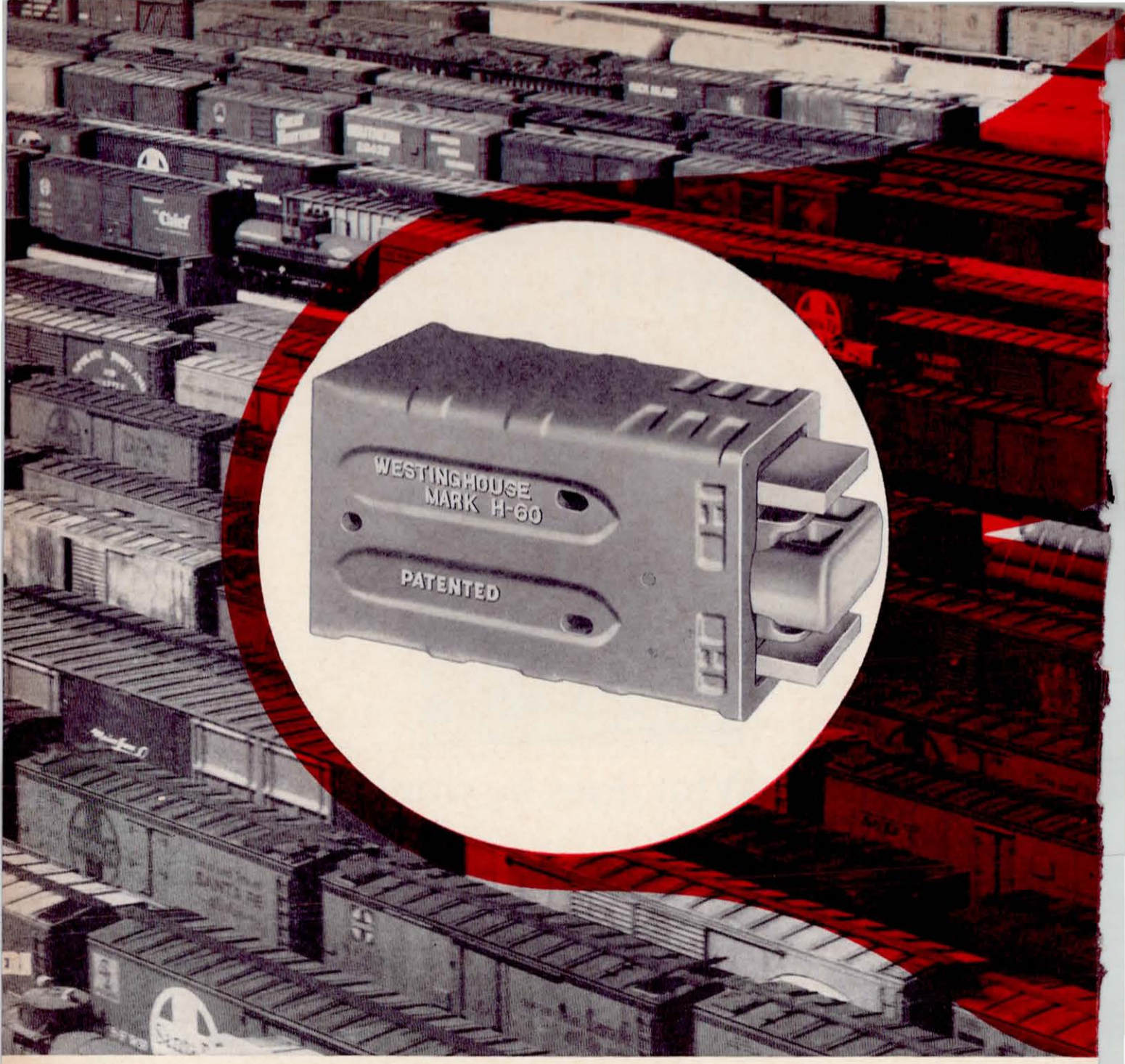
The way to see these sites is with your own eyes. "Each sight," says George, "is worth a thousand words." If you're interested, he'll use a few of those words talking about raw materials, labor supply, and rail connections to every major market in America.

One more thing.

George Defiel's phone number in Chicago is WA 2-2345. If you have a question or two, just give him a call. He won't bore you with a lot of wild blue yonder nonsense.

But he might take you for a ride.

Burlington Lines: Chicago, Burlington & Quincy Railroad; The Colorado and Southern Railway; Fort Worth and Denver Railway.



CARDWELL
WESTINGHOUSE

MARK H-60
HYDRAULIC-FRICTION
DRAFT GEAR

CARDWELL WESTINGHOUSE COMPANY

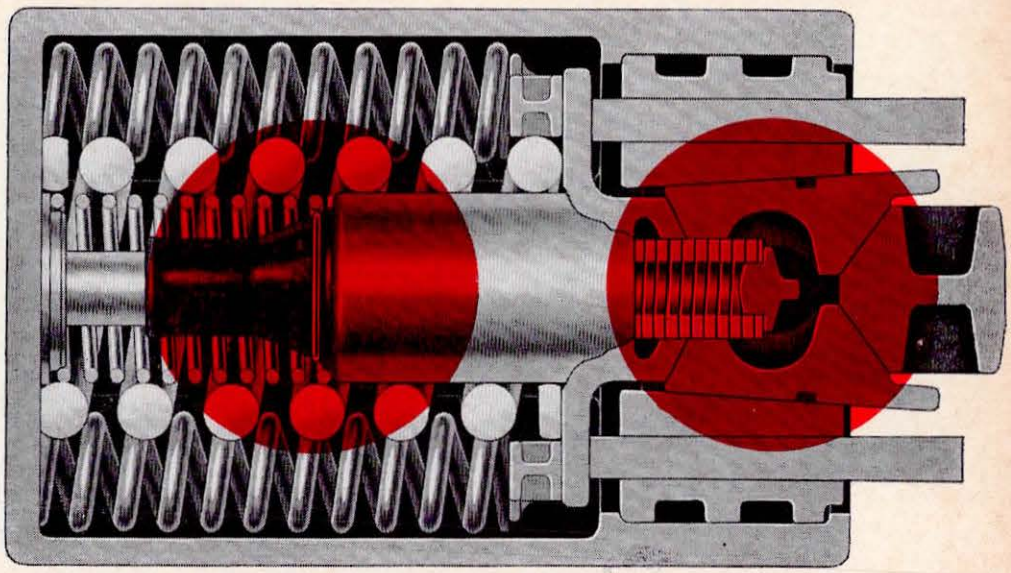
332 S. MICHIGAN AVE., CHICAGO, ILLINOIS 60604 • TELEPHONE 312-427-5051

INTERNATIONAL DIVISION SAME ADDRESS

CANADIAN CARDWELL CO. LTD., MONTREAL 2, QUEBEC

DUAL PROTECTION

for your cars



The Westinghouse Mark H-60 Draft Gear combines hydraulics and friction to offer dual protection for your cars.

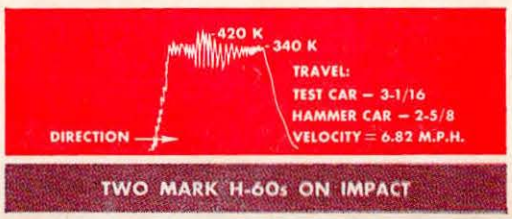
The hydraulic unit of this gear has been service-tested for over three years—performance results excellent! Endurance-tested to over one million compression cycles! **AND,** the Mark H-60 retains the service-proven Westinghouse principle of a spring-actuated friction clutch mechanism known for reliable shock protection in itself! For dual protection for your cars and for profits . . . Specify Mark H-60!

- For all cars having the new standard 17¾" striker and 24⅝" draft gear pockets.
- Travel—3¼".
- Capacity—90,000 Foot-Pounds.
- One follower required per gear . . . No special attachments required.

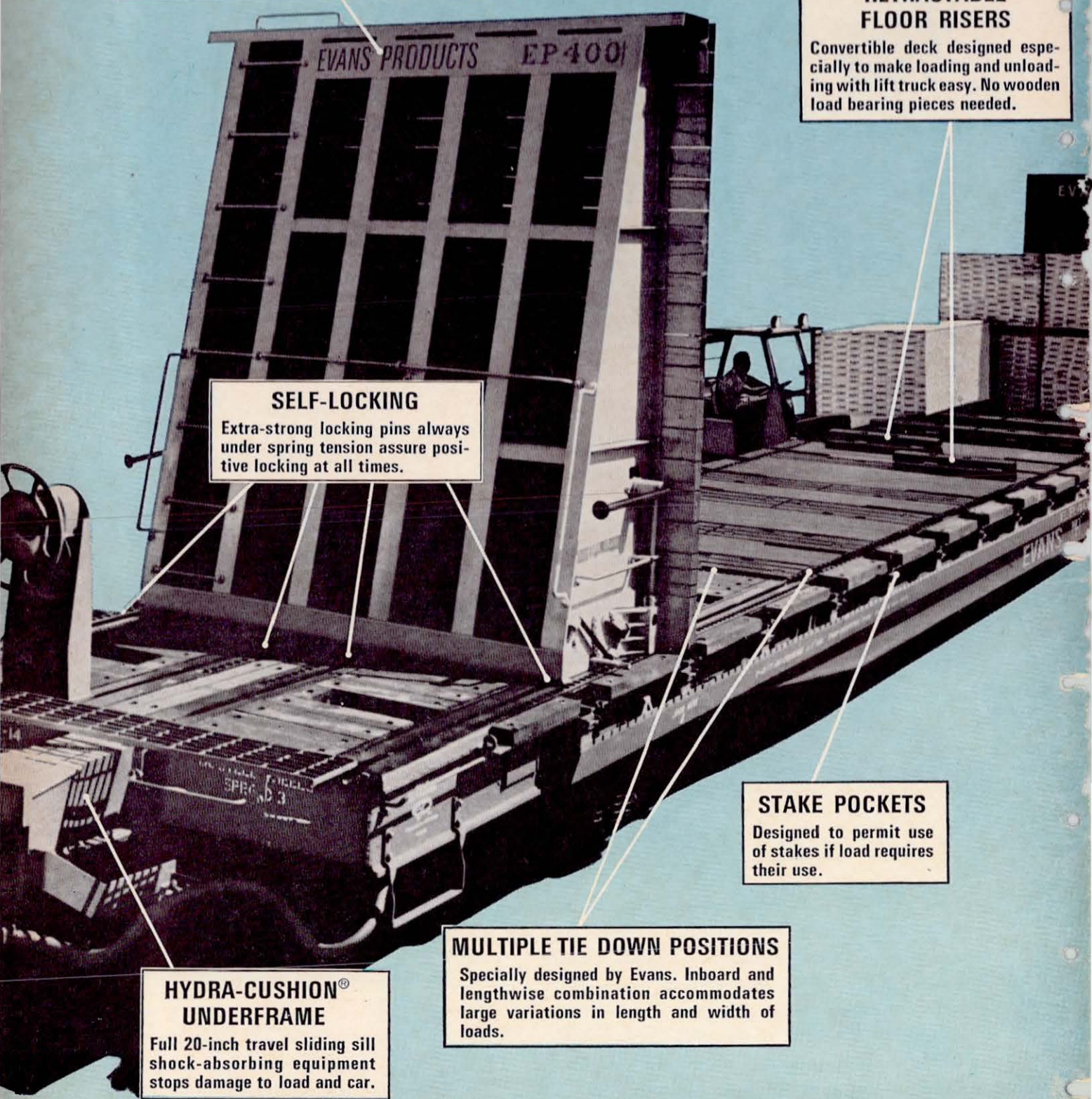
IMPACT TEST

. . . UNIFORM REACTION

The Mark H-60 gear will adjust itself to the corresponding gear in the adjacent car to smooth out variations in reaction upon impact. The pressure-sensitive hydraulic mechanism automatically adjusts itself to impacts with heavy or light loads, high or low velocities. It also regulates pressure or sill force created between two cars in impact. The Mark H-60 with its hydraulic and friction mechanisms provides maximum protection for your cars against impact damage!



World's most versatile flat car .



EXTRA-HIGH SELF-LOCKING MOVABLE BULKHEADS

Each bulkhead is fully adjustable on roller bearings over ten-foot range, at two-inch intervals. Easy one-man operation.

RETRACTABLE FLOOR RISERS

Convertible deck designed especially to make loading and unloading with lift truck easy. No wooden load bearing pieces needed.

SELF-LOCKING

Extra-strong locking pins always under spring tension assure positive locking at all times.

STAKE POCKETS

Designed to permit use of stakes if load requires their use.

MULTIPLE TIE DOWN POSITIONS

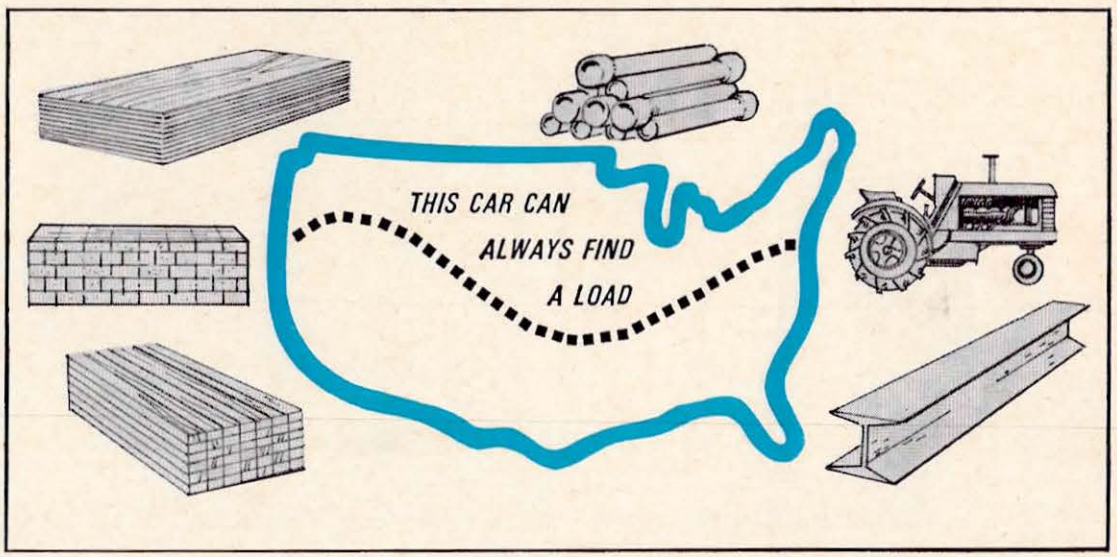
Specially designed by Evans. Inboard and lengthwise combination accommodates large variations in length and width of loads.

HYDRA-CUSHION® UNDERFRAME

Full 20-inch travel sliding sill shock-absorbing equipment stops damage to load and car.

Evans new 100-ton Movable Bulkhead Car

For building products and other types of flat car lading



Revenue Producer—Because this car adjusts to the load, it can find a load anytime, anywhere, producing maximum car earnings. It offers greater profit potential than other flat cars because: its unique load-holding equipment adjusts rapidly to accommodate a wide variety of materials; the car can be quickly reloaded with different lading for the return trip; and it can carry more of different kinds of materials, with faster turn-around than other flat cars.

Built to Take Heavy Loads—Evans unique combination of massive bulkhead construction and Hydra-Cushion* Underframe assures long bulkhead life under the most severe conditions of use.

Proven in Impact and Field Tests—The car has been impact tested up to 14 miles per hour with a ten-foot high, 92-ton load without damage to bulkheads, car or lading. It is now proving its versatility in rail service with the same damage-free results.

Cuts Loading and Unloading Costs—This new car can be loaded and unloaded in much less time than box cars. Dunnage is virtually eliminated.

For Sale or Lease —This car is a highly profitable investment for railroads, and a positive approach to cutting costs for shippers. Evans Products Company, Dept. A-1, Plymouth, Michigan 48170.

evans

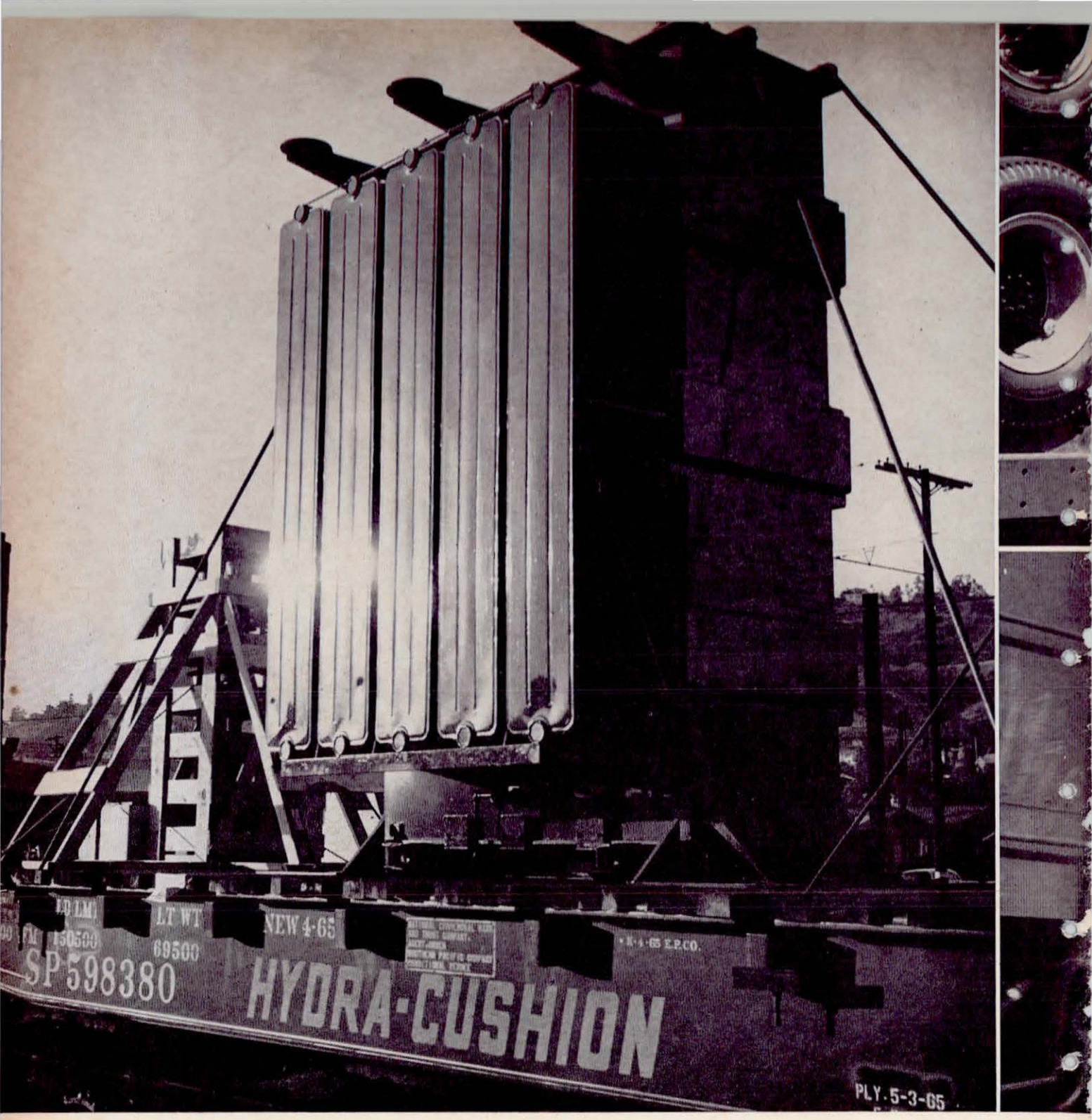
TRANSPORTATION EQUIPMENT GROUP

Plymouth, Michigan—Member RPI & ARCI

Canadian Rep: International Equip. Co., Ltd., Montreal

**Hydra-Cushion is a registered trademark of Hydra-Cushion Incorporated*

Circle 17 on reader service card



Almost any lading and car need this extra margin of cushioning safety.

No other cushioner has it. Hydra-Cushion builds it in!

The Hydra-Cushion Underframe does not depend solely on hydraulics. It combines hydraulic with mechanical cushioning action.

This combination gives car and lading an extra margin of cushioning safety not obtained with other modern underframes. This safety margin derives from the unique design of the Hydra-Cushion Underframe: its mechanical components *alone* cushion a fully

HC® HYDRA-CUSHION®

loaded 100-ton car against impacts up to 6 MPH! And it does not depend solely on mechanical action —its hydraulic unit combined with its mechanical assembly absorb the full range of impacts normally encountered in modern freight car handling.

Shippers who use Hydra-Cushion equipped cars know their lading gets an extra margin of cushioning safety. Railroads know their investment's protected to the fullest.

UNIQUE CONVERSION FEATURE

When you want to convert 100-ton cars with 70-ton trucks to 100-ton cars with 100-ton trucks, the only conversion necessary in your Hydra-Cushion Underframes is simple replacement of a metering pin costing less than 10 dollars! The Hydra-Cushion Underframe is the only cushioning device that offers this unique feature.

UNDERFRAMES

HYDRA-CUSHION INC.

13101 Eckles Road, Plymouth, Mich. 48170
332 So. Michigan Ave., Chicago, Illinois 60604

Canadian Representative: International Equipment Co. Ltd., Montreal

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Your Own RAILROAD

THINK of Kansas City Southern Lines as an integral part of your business... *your own railroad*... operated for your shipping convenience.

That's the way we hope you will view us, since we do our best to give every shipper the kind of service that dovetails with his needs and commitments.

WHEN TIME COUNTS...

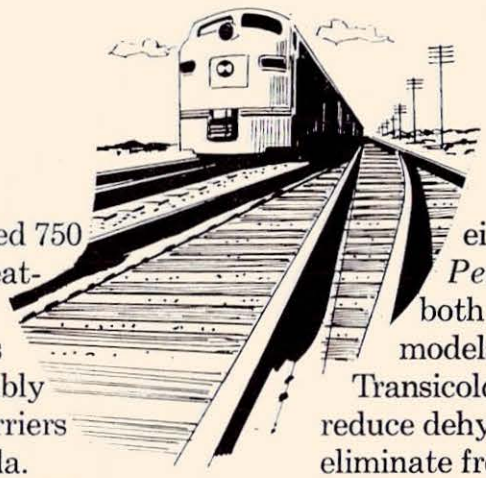
ship the shortest rail way between the Midwest and five Gulf Ports—New Orleans, Baton Rouge, and Lake Charles, Louisiana; Beaumont and Port Arthur, Texas. Other quick service between Kansas City and Dallas, the Southeast and Southwest.

KANSAS CITY SOUTHERN Lines

J. W. SCOTT
Vice President—Traffic
KANSAS CITY, MO. 64105
Tel. 816 VI 2-0077

Circle 19 on reader service card

It's our privilege to equip Pacific Fruit Express and 19 other great rail systems with piggyback refrigeration



Transicold has produced 750 Diesel refrigeration/heating units now serving P.F.E., plus thousands more operating profitably for other major rail carriers of the U. S. and Canada.

Recent orders include 300 more units for P.F.E., 200 for Rock Island, 125 for Milwaukee Motor Transportation (Milwaukee Road) and 125 for Santa Fe.

We prize this privilege because it has been won through Transicold Dependability, which protects cargoes with low, minimum maintenance . . . reliable performance in ambient temperature ranges from —30° to +120° . . . and complete flexibility for all perishables.

Transicold offers power options of either the *Mercedes Benz* or *Perkins* Diesel engines . . . in both nosemount and undermount models of various capacities.

Transicold compressor "Unloaders" reduce dehydration and virtually eliminate freezing of perishables.

Major rail carriers using Transicold: Baltimore & Ohio, Canadian National, Chicago Great Western, Chicago & Northwestern, Denver & Rio Grande Western, Fruit Growers Express Frisco, Great Northern, Illinois Central, Kansas City Southern, Milwaukee Road, Missouri-Kansas-Texas, Norfolk & Western Northern Pacific, Pennsylvania, Pacific Fruit Express, Rock Island, Santa Fe, Southern Pacific, Western Pacific

TRANSICOLD

CORPORATION

TRANSICOLD SERVICE—WHEREVER TRAILERS TRAVEL

1100 South Taylor Avenue, Montebello, California

Circle 14 on reader service card

Another 60 million dollars rolling on Seaboard.

When deliveries are completed next month 3100 new freight cars of varied types and 67 new locomotives will have gone into Seaboard service since last January—an investment of 60 million dollars for better service to our customers.

That's just our latest move in a continuing effort to supply shippers with both quantities and exact types of cars needed for their Southeast business.

Seaboard Superior Service means not only modern equipment, but dependable schedules, advantageous rates and careful supervision as well. It starts with a phone call to your local Seaboard representative.

IN THE SOUTHEAST IT'S

SEABOARD
RAILROAD

THE ROUTE OF COURTEOUS SERVICE

Circle 11 on reader service card

How Johnson & Johnson uses rails for distribution

Domestic Operating Division ships mixed carloads between its three major factories and four distribution centers. Cleanliness, damage protection are among its basic needs.

CAREFUL PACKAGING—and carefully planned unit loading—help to get J&J shipments to destination with "little or no damage."

Never, perhaps, has Johnson & Johnson shipped a solid carload of what may be its best-known product—BAND-AID Brand adhesive bandages. Such a load, in one of the 60-ft, 6,000-cu-ft cars which J&J's traffic people like best, would come to between 40 and 50 million of the handy little gauze-and-adhesive strips.

But if the strips don't move in carload lots, they and others of the company's some 800 standard products are shipped regularly, day in and day out, in mixed carloads. For tariff purposes, the 800-odd products are classified generally as "surgical dressings, drugs, medicines and toilet preparations"; included among them are such diverse items as absorbent cotton, disposable materials for hospital use, and baby oil and lotion.

• **Carload pattern.** Most of those carloads move along or across a roughly diamond-shaped pattern, determined by the four strategically located major distribution centers maintained and operated by J&J's Domestic Operating Division—at New Brunswick, N.J., Chicago, Sherman, Tex., and Menlo Park, Cal.

The first three centers operate in conjunction with manufacturing plants. Some products, however, are manufactured at only one plant, or two, of the three.

That's the big reason for carload shipments between those three locations; and from all of them to Menlo Park, which distributes, but does not manufacture. A secondary reason is the occasional need to transfer work in process from one plant to another.

• **Likes 60-ft cars.** "For our outgoing rail shipments," says Walter K. Cabot, J&J's New Brunswick-headquartered general traffic manager, "we much prefer 60-ft cars with cushion underframes, compartmentizers or other load dividers, and side fillers. If such cars just aren't available, 50-footers will do, but we would much rather have the equipped 60s."

The choice is not a whimsical one. It is based on sound practical considerations. Most J&J carloads are mixed, and products loaded into them may vary widely in size, shape, weight and susceptibility to damage. Thus, load dividers and side fillers make it easier to fill cars to maximum capacity, and to separate different items. The same devices, plus cushion underframes, make for a safer ride.

That the combination pays off in the latter respect is shown by Cabot's comment that J&J has "little or no trouble from damage. It's very small."

• **Cleanliness vital.** Such a statement is a high compliment from a firm like Johnson & Johnson because, as a

Walter K. Cabot has been general traffic manager for Johnson & Johnson, at New Brunswick, N. J., since 1953.

His association with the company goes back, however, to March 1946. He joined it then as a traffic trainee following World War II service as a Naval reserve lieutenant in the Pacific area. After a year as trainee he was named traffic manager at New Brunswick, and held that post until his promotion to GTM in 1953. His pre-war traffic experience began (1935-36) in the shipping department of American Can Co., and continued (1936-42) in claims, operations and traffic work for National Carloading Corp.

He is a member of the Executive Committee of the National Industrial Traffic League; chairman of the League's Common Carrier by Motor Vehicle Committee, and a member of its Committees on Cooperation with Transportation Executives and LCL and Freight Forwarders. He is a past president and member of the Executive Committees of both the National Small Shipments Traffic Conference and the Eastern Industrial Traffic League. Other traffic organizations of which he is also a member include the Drug & Toilet Preparations Traffic Conference; the Atlantic States Shippers Advisory Board; the Grocery Manufacturers Association Traffic Conference; the Association of Interstate Commerce Commission Practitioners; the Transportation Committee of the New Jersey State Chamber of Commerce; and the National Association of Shipper-Motor Carrier Conferences. He is president of the last, and is a founder member of the American Society of Traffic & Transportation.

shipper of medical and surgical supplies, it has to insist on absolute cleanliness both in manufacture and in transit. Hospitals, for example, may and sometimes do reject their consignments if packages are broken or badly damaged; they may even reject unbroken packages if the outside is stained with oil or grease.

Cleanliness in transit begins, Cabot points out, with secure packaging. "If anything, we overpack, for that very reason."

Then the cars in which those packages move have to be clean enough to take them. For that reason, J&J itself cleans every car it uses—even vacuuming the interiors if necessary.

"We expect to do this," Cabot says, "as a matter of course. But we don't want to clean other people's junk out of our cars.

"I know this whole car cleaning business is a definite problem to railroads and to shippers alike, but it seems to me there must be some better way to handle it than by levying an arbitrary $25 charge. I'm afraid that allows too much room for discrimination—not, of course, at the top level, but among local people. And a car which may be clean under the proposed definition may not be clean enough for food products, or for ours."

Where cleanliness is concerned, J&J itself shows no discrimination between cars and trucks. It expects the latter to be just as clean as the former, and even goes so far as to provide cleaning materials and equipment for trucks arriving to pick up loads at its distribution centers.

The same rule holds true for semi-trailers used in TOFC service, even though the company is not a major user of that type of transport. It does use it occasionally, usually under Plan 3 or Plan 2½, when shipments are not large enough to make up a full carload, or when the load mixture is such that rates and weights make its use desirable. The choice between carload and piggyback trailer load is an individual decision in each case—not a matter of set policy.

Shipments are unitized, but without pallets. Slip sheets are used instead, and handling is by clamp truck. Units are designed to permit maximum cube loading in the carrying vehicle, as well as easy handling.

• **Inbound carloads.** In addition to its carload shipments between plants and from plants to distribution centers, J&J is an important user of carload service for raw materials inbound to its various manufacturing plants.

Among products received in that way are packaging paper from the West Coast; rubber; plaster of paris from Oklahoma; talc, to Sherman; and cotton and cotton piece goods to Sherman and Chicago.

Some of its raw materials, on the other hand, originate too close to their point of use to make rail service practical. Within 50 or 100 miles of New Brunswick, for example, there are a host of factories producing corrugated paper for containers, and even the containers themselves. Glass bottles for such items as baby oil are available from southern New Jersey, no more than 100 miles distant.

• **Reliability and car supply.** Outbound, inbound or inter-plant, the company finds regularity and reliability of carload service to be less satisfactory than the relative freedom from loss and damage.

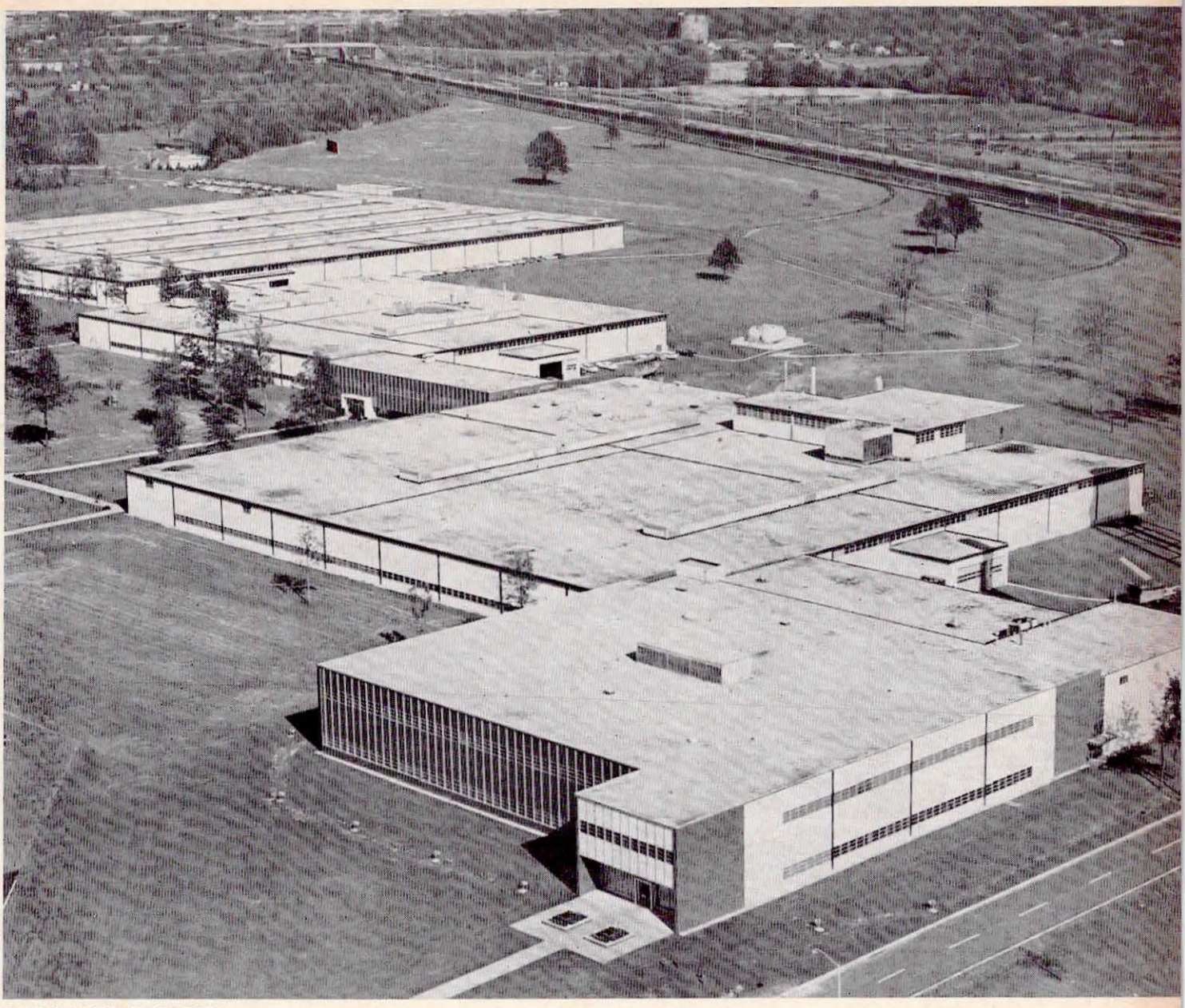
"Rail service has improved greatly," Cabot says. "On the average it is pretty good. But averages are dangerous. Our carload shipments from New Brunswick to Chicago may vary by as much as four days in transit time. The degree of reliability we would like just isn't there."

Improved reliability in service would, he thinks, help greatly to improve car supply. "When I ride or drive by a yard and see the same car sitting there day after day I can't help but wonder why it's not moving to someone who needs it or could use it."

• **Final distribution.** Each of the four major distribution centers listed above serves a particular geographic area. New Brunswick, for example, ships west as far as the Pennsylvania-Ohio line, and up and down the Atlantic seaboard; it covers only two states (Vermont and West Virginia) which do not touch the ocean. Menlo Park distributes to California, Oregon, Washington, Arizona, Nevada, Utah, Idaho, a small part of Montana, and Alaska and Hawaii. Chicago serves the north central portion of the United States, and Sherman the south central.

Shipments from the several distribution centers go entirely by truck, or United Parcel Service, for the rather obvious reason that few or no consignees can take a full carload of products at any single time. They can't always take even a full truckload, so some trucks make drop shipments. Others, destined for example out of New Brunswick to such major cities as Boston or Providence, R. I., are "pooled," i.e., they take shipments for two or more different consignees. Most consignees are hospitals, wholesale drug supply firms or chain drug stores, or chain stores of other types. Truck deliveries are not made to individual stores.

UPS, of course, is used primarily for small or special shipments; it limits



NEW BRUNSWICK

J&J distribution center at New Brunswick, N. J., is strategically located for service from main line of the Pennsylvania (background) and highways. Other centers—Chicago, Sherman, Menlo Park—make up "diamond" pattern serving the U.S.

itself to packages weighing not more than 50 lb, or to aggregate shipments weighing not more than 100 lb to any one consignee on any given day.

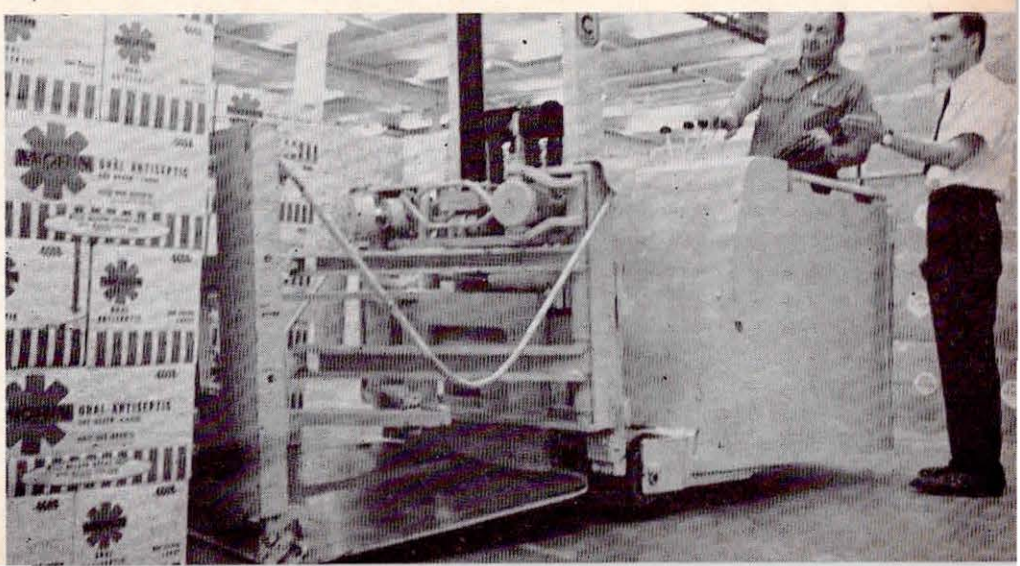
• **Overseas.** With some 56 principal overseas operations in 31 countries in all parts of the free world, J&J has little occasion to make export shipments.

Its International Division (also headquartered in New Brunswick) does, however, use containers for shipments to Puerto Rico. And there have recently been some "very satisfactory" container movements inbound to the U. S. from Great Britain.

• **Traffic organization.** J&J's New Brunswick Traffic Department is responsible only for operations of the

"PALLET-LESS" HANDLING

Finished goods are moved by "push-pull" technique. Here a truck grips cardboard slip sheet which carries the load onto a truck's forks.



WATCHING **WASHINGTON** WITH WALTER TAFT

TAFT

RAIL TRUCKERS NOT RAILROADERS—The Brotherhood of Railway Clerks has failed to get an ICC determination that motor-carrier affiliates of the railroads are carriers by rail when they conduct line-haul trucking operations with tie-to-rail restrictions. These are the restrictions whereby the Commission tries to keep railroad trucking services auxiliary and supplemental to rail operations. They are in most of the certificates which the Commission has issued to motor carriers owned or controlled by railroads.

In denying the BRC plea, the Commission ended the case which was docketed as No. MC-C-5086. The petition filed nearly a year ago, was supported by the Railway Labor Executives' Association. It was opposed by railroad management, the trucking industry, and the International Brotherhood of Teamsters. Favorable Commission action would have resulted in regulation of the involved trucking services—under the Interstate Commerce Act's Part I, instead of under Part II—the Motor Carrier Act. And it would have brought the involved employees, now subject to the National Labor Relations Act, under the Railway Labor Act. They would also have become subject to the Railroad Retirement and Unemployment Insurance acts.

CLERKS SOUGHT BETTER HUNTING—Carriers whose employees are covered by RLA are defined in that act as railroads, express companies, and sleeping-car companies. Also covered are employees working for subsidiaries of those carriers which operate transportation services—"except trucking service." The Retirement and Unemployment Insurance acts have similar scope provisions.

A win for BRC would have advanced its undertakings to represent railroad truckers for collective-bargaining purposes. The relief was sought "expressly" for that purpose, the Commission's denial order said. It added that granting the relief "would tend to conflict with prior interpretations of labor statutes by the courts and the agencies primarily responsible for the administration of those statutes." So, the Clerks were unconvincing to the Commission in arguing that favorable action on the petition was of primary importance to insure proper interpretation of RLA and the Retirement and Unemployment Insurance acts.

WIN FOR TRANSPORT MANAGEMENT—The Commission's adverse ruling goes along with positions taken by the railroads and the trucking industry. The AAR's presentation said the Commission lacked authority to do what BRC asked, i.e., "change trucks into trains by administrative amendment of acts of Congress which provide otherwise." The American Short Line Railroad Association called the Commission's attention to an opinion of the U.S. Supreme Court which said the regulatory agency should never attempt to consider or adjudicate a labor matter, because it "has enough to do in its Congressionally-appointed field."

The trucking industry, as represented by the American Trucking Associations, agreed with the AAR position as to the Commission's lack of authority. ATA also warned that a switch in regulation of rail trucking from Part II to Part I would cause disruptions and adversely affect independent truckers. IBT called the petition nothing more than a "bare-faced" attempt to use RLA coverage, and services of the National Mediation Board, to deprive the Teamsters of rights they have had for many years to represent the employees involved.

NEUTRALS—The Mediation Board and the Railroad Retirement Board were neutrals. The former said ICC action on the petition would not invade NMB's territory—because nothing had become involved which was a labor dispute covered by RLA. RLA relied on advice of counsel to the effect that it should take no position until the Commission decided what to do about the petition.

parent company, i.e., its Domestic Operating Division, with which this article has been exclusively concerned. It does not handle operational traffic or distribution matters for any of the 31 plants operated by the company's 14 domestic divisions, subsidiaries or affiliates, and they have not been covered herein.

The 17-person New Brunswick traffic group does, however, work closely with them. A Traffic and Distribution Council, Johnson & Johnson Companies, made up of the traffic managers of the parent company and all its associated firms, meets about four times a year. Purpose of the meetings is to exchange ideas, and to see how the men involved can work together, and how they can help each other.

Within the Domestic Operating Division, the general traffic manager (Cabot) reports on a national basis to the New Brunswick-headquartered director of sales and distribution service. The local manager of each of the four distribution centers also reports to him.

Each distribution center manager has on his staff a traffic service manager, a manager of sales order service, and a distribution manager. The manager of sales order service is responsible for all paper work on each order received. The distribution manager takes care of the physical handling of each order—receipt of finished goods, warehousing and shipping. The traffic service manager, who reports to the New Brunswick Traffic Department "on a dotted line," becomes responsible for each order after it leaves the distribution center. He handles, in other words, such functions as selection of carriers, routing and expediting. He also takes care of travel reservations for personnel of the plant where he is located.

New Brunswick traffic personnel handle these same duties for the distribution center there, plus household goods movements on a national basis.

Basically, however, their work is of a staff rather than a line nature.

They set general traffic and distribution policies. They handle all "technical" traffic work—docket watching, rate negotiations, appearances on the company's behalf before regulatory bodies and carrier committees, and the like.

They also do all billing for all distribution centers on customer shipments. The practice is for the New Brunswick office to rate bills of lading, calculate charges and pay carriers without waiting for bills to be submitted. Rates have not yet been computerized, but within the next few months the company hopes to have at least its New Brunswick outbound rates on computers. ■

1) If railway car purchases in 1967 have to be reduced below 1966 levels, what types of cars would you like to see given priority in buying?

	Points*		Times ranked first	
Box cars: General purpose	305		26	
Special purpose	202	507	13	39
Covered hopper cars		142		3
Flat cars: Standard	96		3	
Special (except TOFC)	44	140	1	4
Trailer or container carrying flats		75		—
Standard gondola cars		71		5
Standard hopper cars		32		1
Tank cars		13		—
"Others" (wood rack, wood chip, mechanical refrigerator, etc.)		37		—

2) With reference to box cars, what features are of particular interest to you, i.e., what lengths, what door widths, what special fittings? See following text.

3) If a reduction in railroad car buying (for any reason) should lead to car shortages during late 1967 or early 1968, what would be your probable reaction?

Divert shipments to other modes of transport	45
Resort to private carriage	23
Hold shipments until cars become available	15

*On basis of 8 points for first ranking, 7 for second, and so on.

Shippers want box cars most of all

"Plain old workhorses" are in high demand; then special boxes, covered hoppers, flats. Shortages would mean traffic losses.

Shippers want box cars. As a group, they want regular or special boxes far more than they want any other type of rail freight-carrying equipment.

And if cars (of any kind) which they need are not available, the great majority will divert their shipments to other modes of transport, including private carriage.

Those two basic conclusions emerge from this month's well-answered Traffic Poll. It was a Poll designed with a double objective:

(1) To find out where shippers would like to see car buying concentrated if suspension of the 7% investment tax credit or any other reason should force the railroads to cut their 1967 purchases below the high 1966 levels; and

(2) To find out what shippers would do if such a cut should lead to car shortages later this year or early in 1968.

Necessarily the results must be somewhat qualified by the observation that there are probably more shippers who require (or who at least can use) box cars than there are who must have any other single type. A grain shipper, for example, has no interest in flat cars. On the other hand, a man like C. A. Moultis, traffic manager, U. S. Pipe & Foundry Co., Birmingham, Ala., is primarily concerned with open-top equipment. So is J. Robert Morton, Windsor, Conn., director of corporate transportation and traffic for Combustion Engineering, which does not use box cars, but wants gondolas and heavy-duty and depressed-center flats.

There is also the school of thought represented by W. G. Burnette, secretary-manager of the Lynchburg, Va., Traffic Bureau, that "replacement and additional equipment should be made on an equal basis for all products" to handle the national increase in growth and production.

● **"Give us box cars."** Despite those qualifications, the almost overwhelming demand for box cars is perfectly clear. On the "track meet" scoring basis explained in the table above they outrank by well over 3 to 1 the covered hopper cars and flat cars which are virtually tied for second place. And they were ranked first by three times as many respondents as all other types together.

Some men, like A. C. Roy, general manager — traffic, Pennsylvania Glass Sand Corp., Pittsburgh, say they will be satisfied, "for a while, with just plain old steel workhorses." Similarly, E. E. Wyatt, Continental Grain Co. consultant at Houston, calls for "just plain every day box cars"—though it may be noted for the record that Continental is also a major user of covered hoppers.

● **Special equipment.** Other men—particularly those who ship canned or packaged goods, or lumber and lumber products—want somewhat "fancier" cars.

The most popular length appears, by a wide margin, to be 50 ft. About one-third as many respondents ask for 40-ft cars, and about one-fourth as many prefer 60-footers. In the latter group is W. K. Cabot, general traffic manager, Johnson & Johnson, whose interest is mentioned in more detail on page 28C of this issue. It should be noted, however, that quite a few men indicate they would be satisfied with either 40- or 50-ft cars, or with either 50s or 60s.

There is a strong desire for some form of hydraulic cushioning.

Preference for doorway widths of at least 10 or 12 ft, and all the way up to 16 ft, is virtually overwhelming. In fact, half the men who express any opinion on that point ask for 12-ft or wider doors, and/or double doors. Only 1 out of 4 indicates satisfaction with 10-ft openings; and only 1 in 4 suggests anything less than 10 ft. One

Inadequate car supply would lead to traffic loss

man asks for staggered doors, each 15 ft wide.

Plug doors are acceptable, especially, apparently, where they are paired or combined with sliding doors to give two choices of opening width or avoid manipulating a very wide sliding door.

As to interior fittings, there is a marked desire for what are variously described as "DF features," Compartmentizers, load dividers, load restrainers, or just plain bulkheads—all, obviously, wanted as a means of preventing or reducing damage. N. C. Zollar, GTM, Lincoln Electric Co., Cleveland, suggests "split non-rotating bulkheads with handles that can be worked from either side," and double-deck cars for "dense, heavy freight."

Side fillers are also popular, though mentioned less frequently than the many types of load restrainers.

Three men ask for insulated box cars, and two for wood floors and walls.

The only other kind of car for which shippers suggest particular "specifications" are the special-purpose flats. There, the greatest interest is in heavy-duty flats, or in depressed-center cars —also, of course, classable as heavy-duty units. Drawing at least one mention each are flat cars with bulkheads, and with chain tie-downs.

As to "other" cars not listed in the Poll question, there are one or more requests for wood chip cars, wood rack cars, Airslide covered hoppers, low-side gondolas and mechanical refrigerators.

● **Standard or special boxes?** Several respondents explain in some detail their reasons for wanting more box cars, and why they want those cars to be either standard or special.

R. C. Waehner, manager, transportation development, Lever Brothers Co., New York, says, for example, that his company moves more than 500,000,000 lb annually from production points to distribution centers.

"Literally," he goes on, "not one pound of this moves in rail box car service. A great bulk could move by box car if there was available a 60- or 70-ft grocery-type car with side fillers, compartment doors, hydromatic cushion underframe, wide doors and a minimum of 1 or 1½ in. of insulation.

"It is well known that transportation by box car is the most economical mode. Railroads should be able to garner this business at a level of rates that would enable the shipper to do the loading and unloading, and still perform the total service at a cost lower than other modes of transport.

"We have historically been reluctant to request assignment of such expensive equipment on a one-way movement, and have suggested that the railroads coordinate balanced movement from shippers operating in the reverse direction. To date, our efforts have not been fruitful. Apparently the railroads have a number of difficult problems to resolve to make such an operation feasible."

A different viewpoint is expressed from Houston by J. L. Bergen, TM, Uncle Ben's, Inc., who points out that "general service box cars were 27.2% of the fleet in 1965, and are forecast to be less than 20% by 1970. In addition, there will be a numerical decrease.

"We have been feeling effects of a general-purpose box car shortage for loading our finished products over an extended period of time. We are still suffering. There just don't seem to be enough GP box cars of the high classification food products require to meet our day-to-day needs. We hope some improvement in this situation will develop, but the trend seems to be to fewer and fewer cars of this type.

"Even though many former users have gone to cars of other types, including special-service box cars, we wonder how we will be able to continue to ship, if we are already feeling a shortage, when figures mentioned in the forecast above become a reality."

Another advocate of more standard or general-purpose box cars is S. L. Parker, TM, Pacific Lumber Co., Scotia, Cal., who says:

"We use both 40- and 50-ft box cars. The new car building program in the past several years has emphasized 50-ft cars. Perhaps it is time for the industry to review this, and look to replacing or renovating the aging 40-ft fleet.

"I realize this is going against the mainstream of carrier thinking, which seems to be toward larger and larger cars to handle larger and larger loads. But our customers are not responding with larger and larger orders. They are increasingly conscious of inventory control, and many refuse to order full carloads, despite freight penalties."

He also stresses the need for squarely vertical car ends in shipping such commodities as plywood. "We have been put to some expense in blocking ends of cars which have bowed out. I think car builders should study stresses on car ends, and come up with more strength and more resistance to bowing out."

Roy, quoted above, also suggests that "too many orders are being placed for 'glamour cars.' The basic need now is replacement of plain boxes"—plus some high-capacity covered hoppers, and some gondolas and open hoppers.

Possibly, the answer which might best satisfy men on both sides of the question would be the proposal of J. W. Cassell, District TM, Reynolds Metals Co., Sheffield, Ala.—for railroads "to designate as a standard box car a 50-footer with at least 20-in.-travel cushioning and one plug door and one sliding door."

● **If not enough cars—what?** What would happen, if what H. B. Brown, GTM, Mobil Oil Corp., New York, calls the "extremely unfortunate and inopportune" suspension of the 7% investment tax credit (or any other reason) should lead directly or indirectly to car shortages?

The tabulated replies make the answer unmistakably clear: Traffic would be diverted to other modes of transport, including private carriage.

Only a very few companies would (or could) hold shipments until cars became available. At least half of the small minority who even list holding

(Continued on page 41)

Last year's loadings highest since 1960

Loadings of revenue freight for the 52 weeks ended Dec. 31, 1966, totaled 29,617,728 cars, according to the Association of American Railroads. This was an increase of 1.3% over the 29,247,637 cars loaded in 1965, and an increase of 3.2% over the 28,689,106 cars loaded in 1965. The 1966 total was the highest since 1960, when 30,441,415 cars were loaded.

REVENUE FREIGHT CARLOADINGS

For the year ended Dec. 31

District	1966	1965	1964
Eastern, including Allegheny and Pocahontas	11,723,067	11,796,492	11,433,278
Southern	5,860,975	5,798,663	5,575,894
Total Eastern and Southern Districts	17,584,042	17,595,155	17,009,172
Northwestern	4,084,526	3,875,196	3,895,071
Central Western	5,899,431	5,765,318	5,804,879
Southwestern	2,049,729	2,011,968	1,979,984
Total Western Districts	12,033,686	11,652,482	11,679,934
Total All Roads	29,617,728	29,247,637	28,689,106
Commodities:			
Grain and Grain products	2,877,330	2,662,200	2,607,510
Livestock	110,086	124,903	152,886
Coal	5,589,967	5,554,844	5,397,617
Coke	431,983	427,897	420,285
Forest Products	1,995,877	1,978,118	1,926,156
Ore	2,131,250	1,956,490	2,001,507
Merchandise l.c.l.	322,349	459,474	630,008
Miscellaneous	16,158,886	16,083,711	15,553,137
Cumulative total, 52 weeks	29,617,728	29,247,637	28,689,106
Estimated revenue ton-miles (billions) 52 weeks	743.7	697.7	659.1

PFE challenges the future to the tune of $237 million

The giant fruit and vegetable hauler has one of the nation's largest fleets of mechanical reefers, refrigerated trailers and TOFC flat cars.

A hipster, describing giant Pacific Fruit Express, could say that PFE is a company with "plenty of cool."

He needn't be punning, either. He could be referring to PFE's men and managers—not the thousands of refrigerator cars and refrigerator trailers that make PFE the heart of the distribution apparatus that gives West Coast fruits and vegetables a fast ride to kitchens across the nation.

PFE's sixtieth birthday on Dec. 7 could have prompted the comment. Loadings for '65 were about a quarter-million carloads. PFE's managers had experienced a slide in carloadings of perishables since 1946—when PFE handled about a half-million reefer carloads. Yet, so far in the Sixties, PFE managers have bet almost a quarter-billion dollars that they can survive and triumph over the unregulated highway carriers—and lately the air cargo carriers—that have been tearing away chunks of their traffic since World War II.

● **Payoff is at hand.** The awesome investment in mechanical reefers, refrigerator trailers, insulated containers and in experimental equipment is plenty of evidence for the fact that PFE's managers are not about to lose their "cool" in the fight with competition. What's more, trends in reefer size, increased utilization via westbound loadings and possible efficiencies just around the corner from the use of nitrogen refrigerants and artificial atmospheres indicate that the payoff for PFE's "cool" is at hand.

The stability and predictability of rail handling for perishables, all other things being equal, say experts, will enable PFE to regain and ultimately increase its share of the perishables fanned out to the nation from Midwest, West Coast, Texas and Mexican origins.

PFE is jointly owned by SP and UP. It was organized in Utah on Dec. 7, 1906, to expedite shipments of perishables from West Coast points to Midwest, Eastern and Southeastern markets. PFE was to supply, distribute, service and maintain reefers needed by UP and SP for the highly specialized transportation requirements of the harvests of Western orchards, farms and vineyards.

PFE's new equipment installations

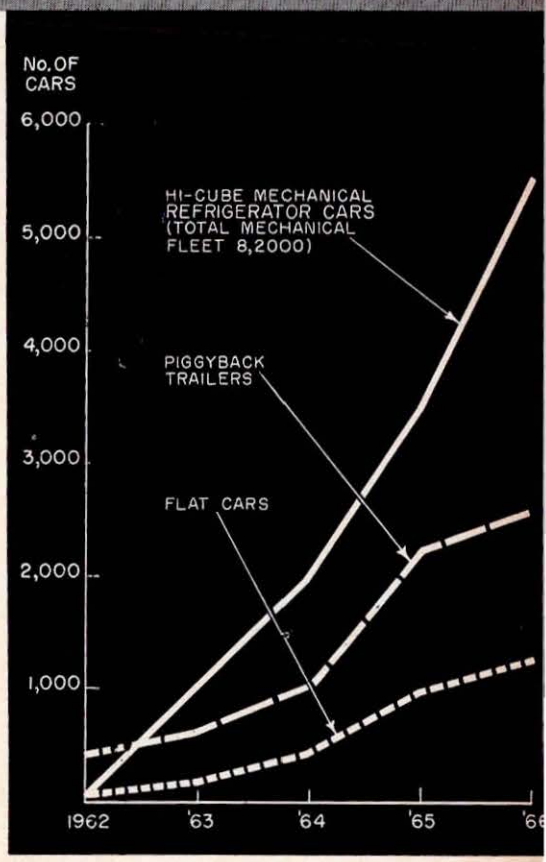
Year	Mechanical Cars	Piggyback Trailers	Flatcars	Insulated Containers
1962	0	390	50	0
1963	1,000	200	250	0
1964	1,000	430	100	12
1965	1,500	1,000	600	38
1966	2,000	500	250	—
TOTALS	5,500	2,520	1,250	50

● **Big job, well done.** By 1907, PFE's reefers handled almost 50,000 carloads of fresh fruits and vegetables. By the end of World War II, PFE reefers had performed so heroically in creating markets for West Coast perishables, that they were accounted one of the most important factors in the agricultural expansion of Western states and Mexico. PFE's reefers handled 465,500 loads in 1946, the company's peak year.

After 1946, PFE's carloads tobogganed. The precipitous drop reflected tonnage captured by gypsy truckers and, in recent years, air cargo handling of specialized perishables, and the effect of higher-capacity cars rolling under PFE's emblem.

PFE met the challenge head-on. It has spent $237,000,000 so far in the Sixties. It developed and installed one of the largest fleets of modern mechanical reefers (about 8,200), refrigerated trailers (2,500) and piggyback flat cars (1,250) in the U.S. In 1962 PFE initiated TOFC service for West Coast perishables. It handled about 7,000 trailers that year. By last year, one in ten of PFE's loadings were via piggyback—and the end of the spectacular rise is nowhere in sight.

PFE's response to the competitive conditions in its transportation marketplace have gotten a leg-up from some astute marketing of space in Westbound reefers. The company's modern mechanical reefers are far more salable for two-way traffic than were the ice-bunker cars. Some 85% of PFE ice-bunker equipment travels Westward empty because it is too wet for merchandise loading and because it has relatively small cube. The dry and much larger mechanical reefers, however, get



westbound revenue ladings about 50% of the time. A great proportion of PFE's TOFC equipment also carries westbound loads because of traffic forwarding agencies which are able to consolidate small shipments for rail movement via piggyback.

• **How PFE functions.** Vice President and General Manager L.D. Schley at San Francisco, Calif., is the carline's chief operating officer. Three assistant general managers, in charge of car service operations, have offices in, respectively, San Francisco, Omaha and Chicago. Reporting directly to Schley are the three assistant general managers, a general mechanical and engineering officer, purchasing agent and auditor in San Francisco, and a general traffic manager in Chicago.

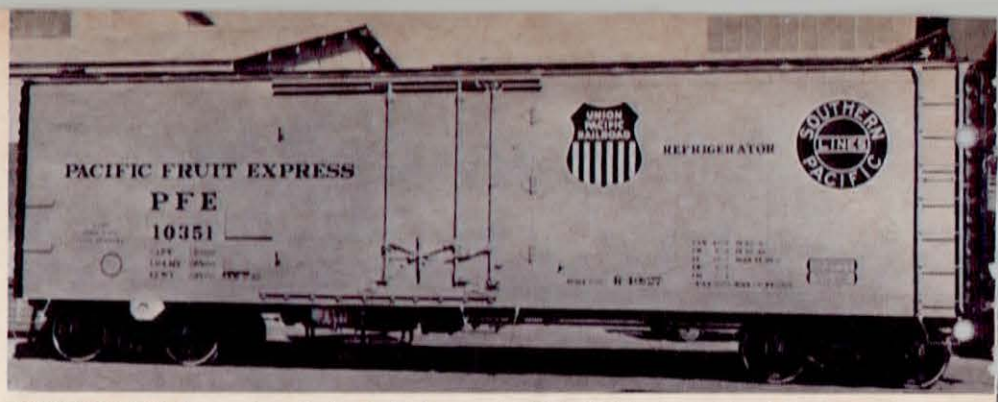
The car service department supplies equipment to the UP and SP when, where and as needed for full protective service, whether heating or cooling by mechanical cars, ice-type cars, or piggyback trailers. Car service also directs the movement of cars and trailers from eastern unloading points back for western loading. Loads are obtained for return trips whenever possible.

The car service department assigns empty equipment to the various districts of the assistant general managers, maintains records of car use and reviews and consolidates the estimates of future loadings.

• **Five big repair shops.** The mechanical department is responsible for designing, constructing and maintaining equipment. PFE currently operates five major repair shops. Heavy repair and program work is done at Roseville, Calif., Tucson, Ariz., and Nampa, Ida., where shop facilities have been extensively improved and modernized in the last 10 years. The latest improvement at Tucson, for example, is a semi-automatic car-painting operation which can turn out six to 10 cars per shift.

Light repairs are handled at those three shops and at two well-equipped shops at City of Industry (near Los Angeles) and Pocatello, Ida. The number of cars handled in 1965 at these various shops was: Roseville, about 64,000; Tucson, 41,000; Pocatello, 38,000; City of Industry, about 33,000; and Nampa 6,200. Daily car handling in the peak season totals about 500 at Roseville and 400 at Tucson.

• **Ice still important.** In spite of the rapid increase in use of mechanically-cooled cars, ice-type cars still render vital service. Ice, purchased under contract in some instances, is primarily supplied from nine ice plants still operated by PFE at Roseville, Fresno, Bakersfield, and Colton, Calif.; Ogden, Utah; Nampa and Pocatello, Ida.; North Platte, Neb.; and Council Bluffs, Iowa.



NARROW-DOOR ice reefers, last of which were built in 1957, do not lend themselves to loaded westbound movements. Substantial perishable tonnages still move in them.

Taking the measure of today's market place

HIGH-CUBE mechanical reefers (above) are steadily joining PFE car fleet. Features of latest models fit them not only for handling frozen and perishable products but also for movement of merchandise, with resultant increase in utilization. The 9-foot door openings (right) are an incentive to increased use of forklifts for loading and unloading.

NEW DIMENSION to PFE operations has been pigyback, with trailers now accounting for one of every ten loads moved in its equipment. Cotton Belt switcher (above) moves two trailers on PFE flat car to interchange at E. St. Louis, Ill. Meanwhile, back in the West an inspector completes pre-trip adjustment on another PFE trailer.

Ice issued at these points in 1965 varied from 6,569 tons at Nampa to 77,044 at Roseville and a maximum of 118,719 at Fresno. During 1965, total ice issued to cars by PFE at all locations was 871,249 tons.

The PFE has always stressed safety work and conducted an intensive accident-prevention campaign over the years at all of its plants with excellent results.

• **A look to the future.** "In spite of the aggressive inroads of competitive transportation media in the shipment of fresh fruits and vegetables, Pacific Fruit Express continues to provide the industry with improved transport tools," says Schley. "We are constantly experimenting with new materials and designs and where practicable, adopting new methods of transportation and incorporating new features and materials into our rail cars and piggyback trailers."

He points out that the expenditure by PFE and its parent lines of $237,000,000 in the last seven years for new mechanically-cooled cars, trailers and piggyback flatcars is ample proof of continued vital interest in rail transportation of fresh fruits, vegetables and other food stuff. It also indicates, he adds, a desire to cooperate fully with the perishable food industry.

Among new methods of hauling produce, Schley says, PFE offers a variation of piggybacking designed to meet the flexibility of trucker service in shipping perishables. The variation is known as PACFORD (Pacific Forwarding Express). It supplements regular piggyback operations by accepting orders for single trailers and by providing multiple pickups at origin and multiple deliveries at destination for a modest additional charge. The service is especially useful to small receivers in local consuming areas.

Sometimes trailers are used by shippers who may handle pickup and delivery with their own tractors. Normally, this phase is taken care of in SP originating areas by Pacific Motor Trucking Co., SP's highway arm, and by Union Pacific Motor Freight Co., in UP originating areas.

PFE has 50 insulated containers in service for combined ship-rail transportation of canned pineapple and other semi-perishable commodities from Hawaii to points within the continental United States. In addition, more than 2,100 of its piggyback trailer fleet have detachable bogies which allow use of the trailers in either piggyback or container service. Schley anticipates TOFC perishable transport, now in its infancy, will continue to grow.

• **New techniques tried.** Schley points out that from 1906 (and until 1952) fresh fruits and vegetables were mainly transported in ice-bunker cars. In 1953, PFE acquired the first of its mechanical cars for movement of frozen foods requiring zero temperatures unobtainable through ice and salt refrigeration.

Since these initial mechanical cars were placed in service and were found attractive by shippers not only of frozen foods but also of fresh fruits and vegetables, PFE expanded its original fleet and has been constantly improving car design.

In 1963, the car line started acquiring high-cube mechanical refrigerator cars, embodying the most modern design and materials. The cars feature foamed-in-place insulation, movable load dividers, underframe cushioning devices to absorb transport shocks, plastic liners and other improvements. The cars are in great demand for heavy perishable loading under the PFE-SP-UP incentive and per-car rate programs. They also are built to carry return loads of high quality general merchandise, which improves car utilization and helps hold down rates. The use of mechanical reefers also eliminates delays occasioned by in-transit icing, further improving car utilization and schedule performance.

• **Research continues.** Over the years, PFE has experimented with various forms of insulation and refrigeration. Many proved either unfeasible or uneconomical. While PFE continues to research and experiment, Schley says that the firm has determined the most dependable and economical refrigeration available is that provided by diesel-powered mechanical systems. Such systems produce either heat or cold as needed. These systems are used in PFE's fleet of modern cars and trailers.

The advent of the space age has

(Continued on page 44B)

Five imaginative leaders behind PFE's success story

PFE's growth and importance to large agricultural areas in the West and Southwest didn't just happen. The 60-year-old car line benefited handsomely from the leadership of five men over the years.

C. M. Secrist (vice president and general manager from 1907 to 1923) and H. Giddings (who directed the company from 1924 to 1942) established sound procedures and policies for the company as PFE ownership of ice-bunker reefers expanded to about 40,000 cars.

K. V. Plummer took over as VP&GM in 1942. He soon established himself as a leader in bringing about closer cooperation between railroads and the perishable food industry. PFE carloadings rose to record levels (465,500 cars in 1946) during his administration and he recognized the potential of mechanically-cooled cars when he introduced them into PFE service in 1952. Plummer was widely known and liked by men in the perishable and rail industries in the U.S., Canada and Mexico. He retired in 1958 and died last year.

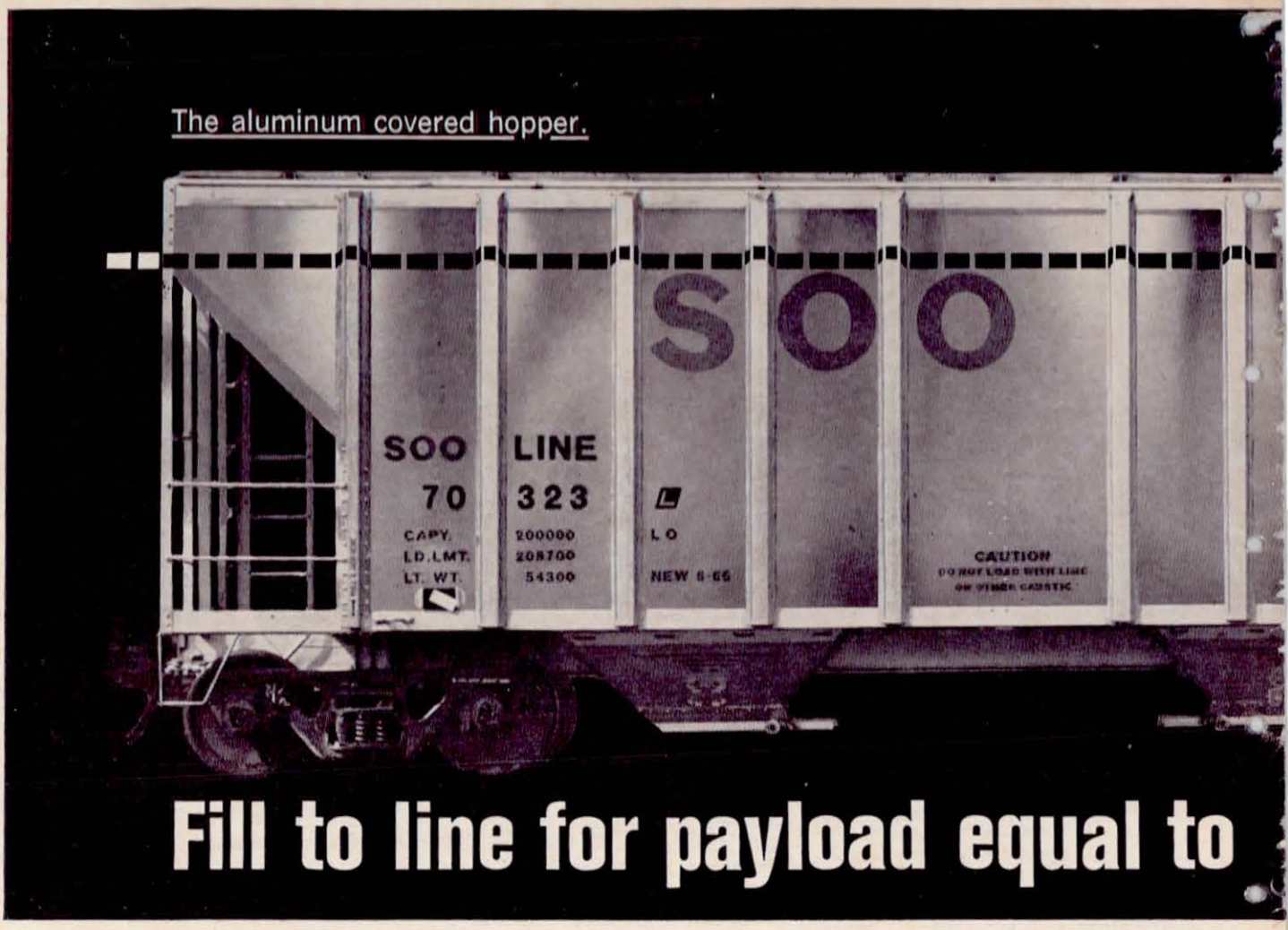
Charles Ahern succeeded Plummer and carried out policies aimed at increasing the average loaded weight of PFE reefers via incentive rates. He died in 1961.

L. D. Schley was named VP&GM in 1961. Schley is importantly responsible for the rapid introduction of high-cube mechanical reefers and mechanically-cooled trailers and containers into PFE service.

L. D. Schley

Pacific Fruit has experimented with nitrogen refrigerants and with artificial atmospheres in the transport of perishable commodities as Schley's forces worked with shippers and railroads in achieving improved utilization of equipment—prime activities for PFE as it battles the competition.

Schley is an SP man who joined PFE in 1947. A native of Utah, he, like the PFE chieftains before him, is an active member of refrigerator car committees and works closely with the various groups and associations of growers, shippers and receivers of perishable food products.



Fill to capacity for up to 8 tons

A 4,750 cu. ft. aluminum covered hopper car can carry 13,500 lbs. more grain than the same size steel car. Aluminum cars in the 2,600-2,900 cu. ft. range carry up to 16,000 lbs. more high density payload than their steel equivalents.

These facts alone can make aluminum hoppers a better lifetime investment than conventional cars, and some simple arithmetic underlines the point emphatically.

Look at revenue-earnings.

An aluminum covered hopper which carries an average of 6¾ tons more payload than a steel car will earn $9,720 more than the steel car over a 15 year period, with two-turn-per-month service and a conservative $4 per ton rate. The table at right shows extra earnings provided by aluminum cars with other rates.

The aluminum car earns a higher per diem rate for off-line service, too. And, if you looked at the records of hundreds of cars made with Reynolds Aluminum now in

ordinary steel car.

extra payload.

Added Revenue Earned By Aluminum Covered Hopper Car Over Comparable Steel Car—Based on 63¾ Ton Bonus Payload

Rates Per Ton	Revenue Additional Per Trip	Revenue Additional Per Month	Revenue Additional Per Year	Revenue Additional Per 15 Years
$ 1.00	$ 6.75	$ 13.50	$ 162.00	$ 2,430.00
2.00	13.50	27.00	324.00	4,860.00
3.00	20.25	40.50	486.00	7,290.00
4.00	27.00	54.00	648.00	9,720.00
5.00	33.75	67.50	810.00	12,150.00
6.00	40.50	81.00	972.00	14,580.00
7.00	47.25	94.50	1,134.00	17,010.00
8.00	54.00	108.00	1,296.00	19,440.00
9.00	60.75	121.50	1,458.00	21,870.00
10.00	67.50	135.00	1,620.00	24,300.00

service, you'd find that their lighter weight reduces round-trip ton mileage, which in turn means much lower operating and maintenance costs than comparable steel cars.

Aluminum cars never need protective painting or lining. So, if you had to line a steel car three times during its lifetime, at a cost of about $700 per lining, the aluminum hopper would save $2,100 in linings alone. You can add to that the savings in revenue which would be lost while the steel car is being serviced.

There is a final dividend with the aluminum-body car at the end of its service life. Typically, it will be worth over $2,000 more in scrap than a steel car.

If you are planning to invest in new cars, look at their *total* cost, their *lifetime* earning power; you'll see why more aluminum cars are going into service every year. For details on aluminum cars, or any railroad application—contact your local Reynolds office, or write *Reynolds Metals Company, P. O. Box 2346-TM, Richmond, Virginia 23218.*

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ALUMINU

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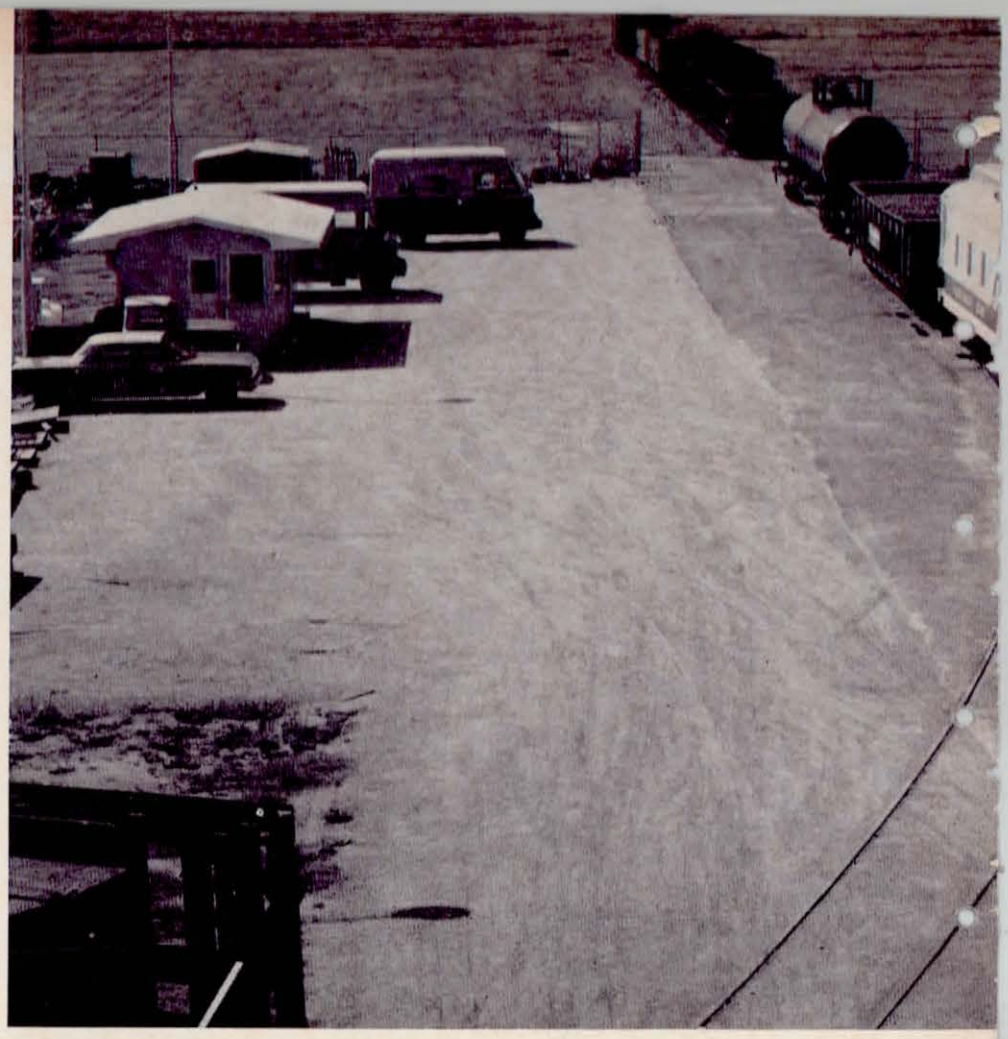
Circle 20 on reader service card

Research pays off for a newcomer

Halliburton's FreightMaster, relatively new in railroading, has emphasized R&D approach.



Railroad research pays off. That's the corporate position of the Halliburton Company which, through its FreightMaster Division, is a relative newcomer to railroading.

Research has long been the hallmark of Halliburton's oil-field service and construction activities, where the firm occupies a dominant position.

● **Railroading and research.** When Halliburton came to railroading, research came with it. The payoff has been the steady growth of the FreightMaster Division with sales of over $14 million in freight-car cushioning units in 1965. There are plans for a completely new plant at Forth Worth, Tex., by 1968. More than 24,000 cars will soon have FreightMaster units.

According to Vice President Thomas W. Painter, who heads FreightMaster, at least 7% of all Halliburton's research expenditures are presently related to railroading. And, he continues, "there has been a virtual doubling of these expenditures in each year since the Research Center at Duncan, Okla., started doing railroad work in 1962."

● **Mobile laboratory.** The latest, and probably most spectacular, phase of this R&D is the fully instrumented research car, a rebuilt 1925 Pullman car which just recently completed its first road assignment on the Frisco. Halliburton has many other rail research tools. Most unusual probably are the 4,000 cases of canned pork and beans which have constituted the "typical" fragile box-car load in many of the investigations involving FreightMaster's impact absorbing units.

Along with the specialized railroad R&D facilities, there is also the corporate research strength based on oil-field technology. Halliburton has had to develop particular capabilities in high pressures, high forces, and vehicle dynamics in conjunction with its petroleum-related operations. Many of these are finding some application to Halliburton's relatively new rail-oriented activities.

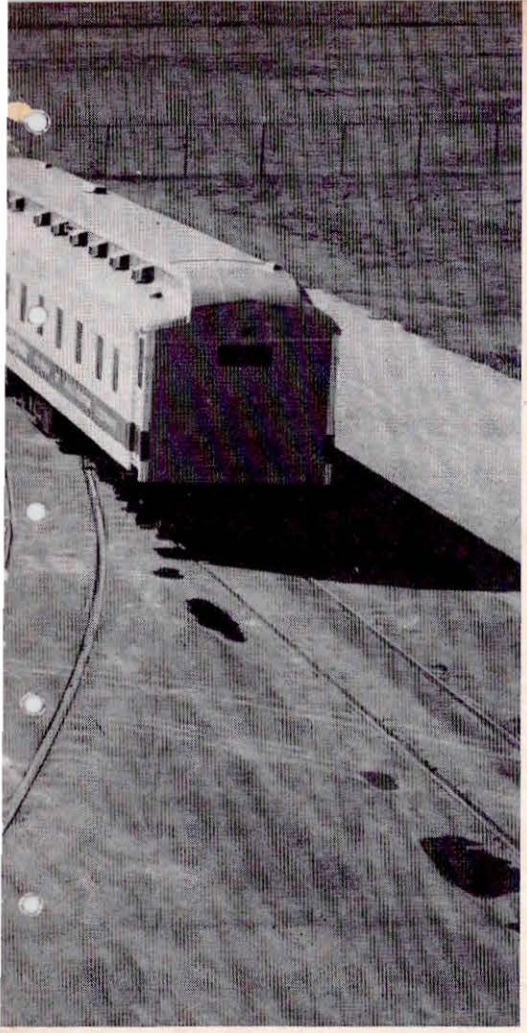
● **Established design.** While Halliburton has brought a formalized R&D attack on FreightMaster's research problems over the past five years, the end-of-car hydraulic cushioning concept came to Halliburton almost a decade ago in virtually its present form. The device is the invention of a one-time business-machine troubleshooter, William T. Blake, whose experience with small hydraulic dampers impressed him with their potential for dissipating large amounts of energy such as are involved in freight-car impacts. For nearly ten years following World War II, Blake designed and refined his freight-car unit, finally licensing it to Welex Jet Service of Fort Worth in 1956 when he was convinced the device was practical and ready for marketing.

The FreightMaster unit fits within conventional center sills at the ends of a car. It transmits coupler forces to a hydraulic fluid system. The system consists of two separate chambers connected by valves and ports. Fluid moves between the two chambers and, in so doing, absorbs execessive impact energy. Strong springs—the unit's restoring mechanism—then return the unit to its normal position ready for the next impact. Unlike most hydraulic cushioning systems, the FreightMaster housing moves and its piston remains stationary.

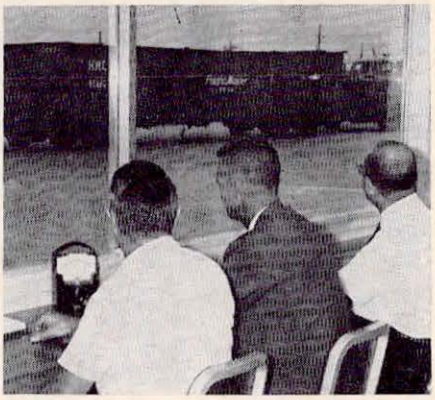
● **Bucking the trend.** Welex took its plunge into railroading because it was seeking diversification outside the oil industry. In 1956, when railroading's outlook seemed less than bright and many old-line railroad suppliers were aiming to diversify into other fields, Welex bucked the trend by diversifying into railroading. The following year Welex, including its infant operation that was to become FreightMaster, was acquired by Halliburton.

The traffic decline which made railroading's outlook seem bleak in 1957 actually was producing demands for improved freight cars that would insure a growing market for FreightMaster and other producers of hydraulic cushioning arrangements. In 1956 Welex had installed a pair of prototype units in a Santa Fe car which were then appraised by the railroad's test department at Topeka, Kansas. The following year nine additional carsets, somewhat refined, went into Santa Fe and Southern Pacific cars. In 1960 the device was given AAR sanction.

● **A ready market.** By 1960 the



RESEARCH CENTER at Duncan has rail facilities including instrument building and vans (left), research car and group of freight cars on test track, and trailer-laden piggyback car on wye (lower left).



GONDOLA fitted with cushioning is accelerated by truck for an impact test as the operation is viewed by spectators seated in the instrument building beside the test car.

drive to acquire specialized freight cars to gain and hold business was moving into high gear. FreightMaster and several competitive hydraulic devices had shown their superiority over conventional draft gears and were being applied with increasing frequency to cars hauling fragile commodities.

From the time Halliburton acquired Welex and FreightMaster, an intensive research and development program on car cushioning was pushed. Initially, this work was carried on by FM's own mechanical engineering group at Fort Worth. Subsequently, it became a joint effort between the FM mechanical group and Halliburton's big Mechanical Research and Development Department at the Duncan general offices.

In 1962, with installations growing rapidly, says Vice President Painter, "it became necessary to develop and evaluate the performance of our unit with fully instrumented impact tests." Although a comparative neophyte in railroading, FreightMaster was aware of the cyclical nature of the industry and felt vulnerable with only a single product. After scientific appraisal of its unit, the next R&D goal was to be development of a broader spectrum of railroad products.

• **Impact testing.** Appraisal of the impact absorption properties of FreightMaster was made on the Rock Island at Waurika, Okla., 25 miles south of Duncan. By this time, the first FM instrumentation van—a highway vehicle—was available. With the van and as many as 18 freight cars—plus scientific gear such as accelerometers, strain gages, dynamometer couplers, radio control and elaborate monitoring devices—the conventional FreightMaster units and experimental models with adjustable port and valve controls were subjected to test. Thousands of impacts were conducted and analyzed.

R&D activities aimed at producing new railroad products were actually beginning to get under way late in 1964 when a problem relating to train action occurred in Canada. The occurrence was not only a setback for FreightMaster, but for the entire end-of-car cushioning concept.

The train-action problem was discovered during the movement of blocks of 30 to 50 empty cushioned cars from the carbuilder to newsprint loading areas of Quebec. It was characterized by a ride which was rougher than normal and by several occurrences of broken knuckles.

An investigation of the conditions associated with the train-action difficulties showed the cushioned groups to have been preceded by 40 to 60 cars equipped with standard draft gears and trailed by 5 to 15 similar cars. The knuckle failures occurred in the loaded standard car group trailing the group of cars equipped with cushioning units. The failures occurred on trackage where grade changes produce severe train action even when all cars are equipped with conventional draft gears.

• **Train dynamics problem.** The Canadian National set up a research project to develop some information about the little-known subject of train dynamics, concentrating particularly on the phenomenon developed in the end-of-car units. The problem was defined during the first instrumented road test when end-of-car units were observed to extend and compress at rates so low that very little hydraulic resistance was developed.

"It is almost a blessing our trouble developed on a research-minded railroad like CN," observes Painter. "That road had the interest, personnel and facilities for a real scientific appraisal. It would not have been difficult to solve the train-action problem if we had not had to retain the impact protection in our device. The challenge in solving the problem in Canada was to improve our unit's resistance to low run-out forces and still retain all of our cushioning benefits of protection against high impact forces."

After several months of testing at the test track in Duncan, and on U.S. railroads, as well as on the CN, the problem was solved. Changes were made in the metering system of the FreightMaster unit so that it overcame the former tendency to extend too easily under train forces while retaining its cushioning abilities. CN has since ordered FreightMasters for additional installations.

• **Canadian National reports.** CN, at a recent meeting of the American Society of Mechanical Engineers in New York, reported that cars having end-of-car cushioning devices designed for proper yard and road performance can be operated satisfactorily in blocks in trains running over undulating terrain. It was further shown by tests that trailing loaded cars will actually be subjected to lower train forces than if they were behind cars with conventional draft gears.

By the time the train-action problem was solved, FreightMaster had its own test track at Duncan, making it unnecessary any longer to work in Rock Island's Waurika yard. The new facility simplified the product development work which once again could be resumed. Along the test track are an instrument building containing a battery of recorders and a wye for turning cars. FreightMaster technicians have chosen to accelerate cars by pushing with a highway truck rather than by releasing them from varying heights on a ramp as is done by many other car-impact investigators. Over-the-road testing is still done on the Rock Island and the Kansas City Southern. KCS has a higher proportion of FreightMaster-

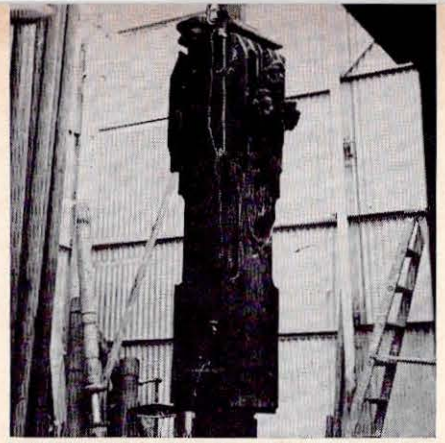
equipped-cars than any other railroad.

Factors such as speed of impact, coupler forces, stresses—anything convertible to an electrical signal—can be recorded at Duncan or on the road. Nine freight cars are available for test purposes. Most recent acquisition has been the research car.

● **New products.** The new product, already at the prototype stage two years ago when the train-action problem arose, was a vertical stabilizer for freight-car trucks utilizing the basic FreightMaster hydraulic concept. While it has been this hydraulic stabilizing device in hopper cars which was tested during the research car's recent trips over the Frisco, the device has not yet been marketed.

Actually, the demand for another freightcar device intervened and the resultant device—the coupler positioner (RA, July 25, 1965, p. 58), was perfected and marketed initially several months ago. In 1965 Linde had had a series of special tank cars for hauling cryogenic materials fitted with FreightMaster cushioning.

When longer versions of these cars were ordered by Linde early in 1966, it was necessary to fit them with long-shank F couplers and the corresponding F-style cushioning units. Shortly



END-OF-CAR UNIT is subjected to high forces in experimental well drilling rig, an example of kinship between oil- and rail-industry R&D problems.

there arose the same problem of passed couplers which has plagued many of the recent 86½-foot auto parts box cars and piggyback cars.

● **Coupler positioner.** The FreightMaster solution has been to connect the coupler to the truck so that any truck swiveling results in a corresponding movement of the coupler. As the car traverses a curve, the coupler also swings over. As the track straightens, so does the coupler.

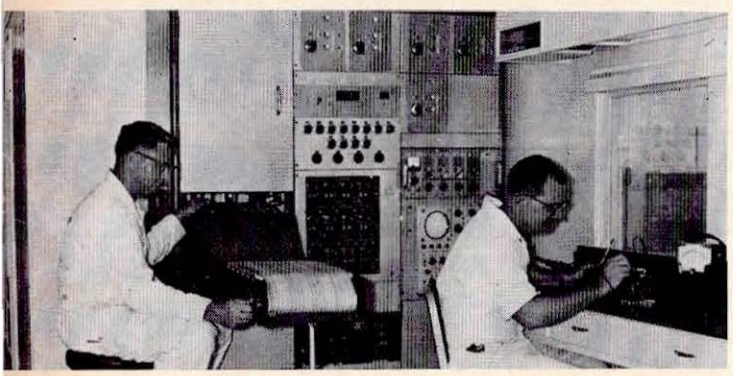
The 15-degree curves of the wye in the test track at Duncan and several over-the-road and yard tests with a leased 89-foot piggyback car put the positioner through its paces many times before the device was ready for sale. Linde subsequently equipped its big tank cars with the device.

Along with work aimed at solving problems involved with its own products, FreightMaster engineering and research organizations have been utilizing their rail technology capabilities in studying problems for others. Impact tests and stress analyses have been made on various types of cars for Bethlehem Steel, Darby, Ford Motor, Pacific Fruit Express, Paragon, Richmond Tank, Soo Line, Southern, Trailer Train, U.S. Gypsum and Whitehead & Kales. FreightMaster expects soon to make its research car available for investigations of longitudinal actions in freight trains of more than 200 cars.

● **Continuing development.** Meanwhile, product development goes ahead.

Don H. Hathorn, manager of mechanical research and development for Halliburton, estimates that 20% of his organization's activities currently are railroad oriented. "Oil people are finding it very interesting to deal with railroad industry problems," he says. A petroleum-related corporation which diversified into railroading is apparently finding its new venture successful. ■

Mobile laboratory designed to appraise train dynamics



RESEARCH CAR is instrumented to measure and record virtually any technical data which might be produced in the railroad environment. Multichannel recorders in instrument room (left) can receive signals by radio telemetry or cable from sensors.

Heart of the new FreightMaster research car, a completely refurbished 1925 Pullman, is the 26-foot instrument room with its six equipment racks and three work tables. An electronic speed-measuring system gives a digital readout to 0.1 mph and produces analog signals for other recorders. A special inclinometer gives the grade which the car is traversing at every moment—an important feature in appraising train dynamics.

A special radio telemetry system permits transmission of data from many points throughout the train without the need for connecting wiring to the research car. Data on such a locomotive throttle position and brake-pipe pressures can be transmitted to the paper and magnetic tape recorders. Amplification and recording equipment can take a multitude of train data simultaneously — coupler forces, relative movements between cars, acceleration, vibration, car away and other factors—from numerous points in a train.

The research car is fitted out with living quarters for ten. And, naturally, it has been equipped with FreightMaster hydraulic cushioning units.

Shippers want box cars first

(Continued from page 32)

as a possibility state that it would be: (a) A last resort, in the event other modes of transport proved unable to take their business; or (b) limited to whatever shipments must move by rail.

For example, Moultis, already quoted, says he would have "no alternative but to hold on such raw materials as coal, ore and stone. But a big percentage of finished products would probably be diverted to truck."

J. C. White, TM, Ingalls Iron Works Co., also of Birmingham, takes much the same position—that "mode of transport would be determined by urgency and size of material." So, essentially, do W. E. Maley, director of distribution, U. S. Borax & Chemical Corp., Los Angeles, and E. J. Davis, director of traffic, Caterpillar Tractor Co., Peoria, Ill. "We would hold shipments to some degree, but of necessity would find other means of transport," says Maley. Davis would "use available cars for shipments that can only move by rail because of size, and divert small units to other modes."

On the other hand, W. W. Clark, manager of routing, Pittsburgh Plate Glass Industries, Pittsburgh, points out that "most shipments cannot be held over 24 hours before being diverted. Our obligation to our customers is not completed unless the product is delivered where and when required. Equipment shortages and slow service make this extremely difficult, and often the only logical alternative is diversion."

An even stronger statement comes from J. M. Hagerty, TM, Parke, Davis & Co., Detroit: "Obtaining suitable cars has been a frustrating and time-consuming process for the past 18 months. Any reduction in supply would make the condition unbearable." Also from Detroit, C. P. Rowe, AGTM, S. S. Kresge Co., writes that lack of freight cars "would hinder our expansion program, and reduce the service much needed by our Discount Division."

It all seems to add up to one or more of four solutions:

1) More use of TOFC (J.D. Dawson, GTM, Norton Co., Worcester, Mass.);

2) Better use of present cars (R. S. Trittelwitz, TM, Durkee-Atwood Co., Minneapolis);

3) Greater incentives to shippers to provide their own cars (J. A. Griffin, transportation manager, Swift & Co., Chicago); or

4) Best, continuance of the highest possible rate of car buying. ■

LUTHER MILLER

AS THE EDITOR SEES IT...

AS OTHERS SEE US—Try as we may, we find it difficult to be wholly and coldly objective about the railroad industry. Where others see warts, we discern beauty spots. In the darkest cloud, our radar can detect a silver lining. It is, therefore, comforting to find a publication which has no particular wheel to grind sharing our own exceedingly bullish feelings about the future of railroads.

Such a publication is Forbes magazine. Taking a sensibly long view, the editors of Forbes (in their Jan. 15 issue) look ahead to 1970 and they like what they see: 890 billion revenue ton-miles of freight (up 20% from 1966); $12 billion in gross revenues (up 12%); and net profits of $1.4 billion (half again as much as railroads earned in '66).

Even the passenger side of the ledger looks moderately good to Forbes—because "federal, state, city and railroad expenditures for passenger service will reach about $1.5 billion a year by early 1970."

The stock market remains skeptical, notes Forbes, "but over the next few years [Wall Street] may be forced to eat crow. The railroads will never be a glamour industry, like office equipment, say, or airlines. But they may well one day soon attain the level of electrical utilities as a sure-growth industry with cyclical characteristics."

Forbes is by no means uncritical of railroads—far from it. A long-time and blunt-spoken management-watcher, Forbes asks: "Does railroading have the management to take advantage of this profit potential?" and answers: "Not entirely, but it's getting there." To a second big question—"How long will it take to make a real breakthrough in revenues and profits?"—the Forbes reply is: "Perhaps not until 1970 or so, but it's coming."

THE BOYD VIEW—One reason for Forbes' optimistic outlook on railroads may be some statements made to that magazine by Alan S. Boyd, Secretary of Transportation, in an interview. Said Mr. Boyd:

"Anyone who looks carefully at transportation nowadays realizes immediately that inland waterway operations have their limitations, physical limitations. Barge tows now run to about 36 barges. This can be enlarged, but never as much as the railroads can enlarge their hauls. You have the problem of river current and depth of channel, and of locks.

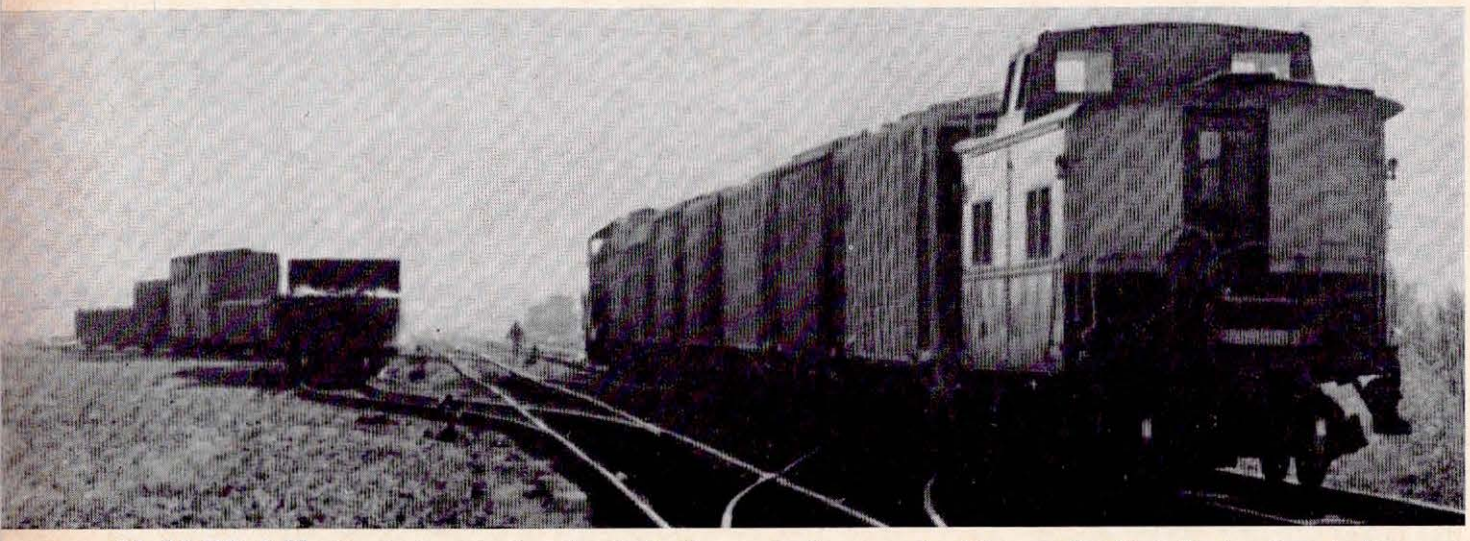
"Highways also have their limitations. You can't move mass amounts of cargo on highways. There's a great deal moving on the highways now and there will be more. The fact still remains: Trucks are pretty much unit-limited. And, as the government permits more length and weight, it will also increase user charges. With the railroads owning their own rights of way, they can add more cars and more weight without worry about user charges."

CANDID CAMERA—Photographer James R. Hoffman snapped this picture at Pittsford, N.Y., and sent it to the New York Central with the following note:

"Being an avid railfan, I can appreciate the tight financial situation the railroads are facing. Even though most capital expenses are the results of long-planned decisions, I have a suggestion which should warrant immediate action. Buy a dictionary for your sign-maker."

Apologized NYC Vice President Douglass Campbell: "Our people have been spending more time recently with service and balance sheets than with dictionaries."

At 9:30 A.M.: A three-man crew picked up this seven-car train, fully loaded and ready to go, on a limestone shipper's



At 11:00 A.M. The train arrived at its destination—a steel company's siding on the West Trenton branch—the same morning. The move was swift because there was no switching or crew change; train moved through with minimum delay.

Reading makes a Bee-Line for profits on short hauls

'Creative prospecting' for traffic is Reading President Bertrand's motto; here's an example.

C. E. Bertrand

Going by the book, railroads are supposed to concentrate on long-haul traffic because that's where the profits are. Reading's new "Bee-Line" service doesn't go by the book, though: the railroad is proving that it's possible to give a shipper prompt, efficient service on a short move and still retain a reasonable incentive for the railroad.

How is it done? That's a story that Reading President Charles E. Bertrand likes to tell.

"Reading is a short-haul railroad," he pointed out. "In spite of having about 1,200 miles of routes, our average haul is less than a hundred miles. There is a lot of rail competition in our territory, but the big potential for developing new business lies in capturing—or recapturing—traffic that is now moving by truck. We knew that for short distances, such as between any two of our on-line cities, the big selling point the motor carrier salesman has is same-day service. We asked ourselves how we could compete by providing same-day service also."

If Philadelphia and Reading are just 60 miles apart, he asked, "Why is it necessary for a carload shipment to take three days between these two points?"

There's an answer to this, of course: It takes a day to switch at Philadelphia,

siding on Reading's Chester Valley branch. Destination was 40 miles away.

"WE MADE IT": Crewmen A. Kemmerer, W. Andres, J. Bolis did the job.

a day to move the car over the road, and another day to switch at Reading.

But Bertrand stressed, "That's the traditional answer, but not the right answer. The right answer is that it is physically possible for a crew to take an engine at Philadelphia, pick up a string of loaded cars at a customer's siding, operate as an extra train over our main line to Reading, and spot the string of cars on the consignee's siding, in approximately two hours elapsed time."

Sound easy? Not exactly—there were problems of costs, of operating flexibility, ticklish labor questions to resolve.

According to the Reading's top officer the volume of traffic involved did not have to be gigantic to be profitable, provided certain "ifs" were met: "We concluded that a small train could reasonably be operated with a three or four-man crew, and that with a reduced crew and no yard-switching, a train of as few as five cars would make money."

"The whole operation, he explained, "of course hinged on labor's participation. We needed an agreement with the Brotherhood of Locomotive Engineers, the Brotherhood of Railroad Trainmen, and the Order of Conductors and Brakemen that would permit us to operate the proposed short train with a crew consisting of one man from each of the brotherhoods.

"We went to these brotherhoods on our property and explained what we wanted to do. We pointed out that our employees would benefit if we were able to bring in new business, just as we would . . . We had excellent cooperation from our organizations, and after some concessions on both sides, signed agreements permitting us to run these trains with reduced crews."

● **Green light from labor.** Another crucial aspect of the labor agreement had to do with crossing of job demarcation lines: Bertrand noted that the crew on the Bee-Line trains performs both switching and yard service, and goes through terminals where seniority rules would in other circumstances require a crew change.

Bertrand called labor representatives "far-sighted" for agreeing to this change. "Both sides," he said, "recognized the importance of creating new services that would mean more revenue for the company and more employment for labor."

● **How it's working.** The first shipment under the new service took place a month ago. Reading used a seven-car train to move limestone 40 miles from a shipper on the Chester Valley branch to a steel company on the West Trenton branch in record time: from shipper's siding to receiver's siding, the trip took one and one half hours.

Bertrand described just how the service works:

"A shipper gives Reading two hours notice of his desire for Bee-Line service. We then dispatch a Bee-Line crew from the 'extra' boards—this is one of the benefits from the labor point of view; all of the men employed in the service come off the extra boards, which means more jobs—assign a road-switching locomotive and caboose, and pick up from the shipper's siding a train of from five to 20 cars already loaded and ready to go.

"This same crew operates over the road and through to destination, running through any division or terminal points en route. At destination, the cars are spotted on the receiver's siding. The crew then returns to home terminal, with a return train if available. There are no layovers. Pay is on a mileage basis, with a minimum of 100 miles. Anything over five hours is paid as overtime. One pickup or setoff is permitted in each direction."

● **Everybody wins.** The service benefits everybody, Bertrand pointed out—the shipper, because of the improved service; the railroad, because it makes rails more competitive with trucks; labor, because it creates new jobs and (since the Reading is fairly small) gets a crew member back home in a reasonable time.

From the point of view of Reading's management, the Bee-Line service is just one aspect of a larger drive to put the road on a sound footing.

● **Reading's comeback story.** "In 1956 and 1958," Bertrand recalled, "Reading's revenues reached record highs. Shortly afterward, the bottom dropped out for us, and Reading operated at a deficit from 1961 through 1964."

By 1965, the road was in the black, and the same was true in 1966—and the key factors were rigid cost control and what Bertrand called "a sustained search for new business."

But with wages and material costs going up, competitive efforts have to be stepped up. Bee-Line is one way; another is streamlining the organization.

Reading's top officers decided that operating and sales people ought to get to know each other's jobs better, if Reading was to become more customer-service-oriented. Said Bertrand: "The initial step toward integration came when our vice president, operations and maintenance was named vice president, staff, and given responsibility for sales and marketing and piggyback as well as operations and the mechanical and engineering departments."

Off-line sales offices were reorganized, and their number expanded, training programs were revamped, new sales and marketing tools added.

"The old style traffic manager is becoming a new-style distribution manager," Bertrand found. He called this part of the "creative prospecting" for customers Reading is doing—and said, "There's gold in them thar' hills, if only we have the creative imagination to find it and get it." ■

A broad approach to rail research

National Castings collects a mountain of diversified data to aid its R&D decision makers.

"Oh, well, back to the drawing board," was the great line under The New Yorker cartoon a decade ago showing an inventor smiling weakly at a group of angry generals who had just watched an experimental airplane smash into the ground.

There's little humor in the line for the railroad officer or supplier who has just bet a bundle of cash on a research or development project.

And it's a line that won't be heard at National Castings Division, Midland-Ross Corp., if the division's vice president, Larry Blackmon, has his way about the matter, or if a system called "Diversification Research" installed at NC's Technical Center in Cleveland performs as it should. Blackmon says NC doesn't believe in allowing its R&D cash to be at the mercy of a few dominant management tyros or even at the mercy of outside experts called in for opinions.

• **Deep probing is needed.** "The failure of some traditional approaches is they don't go deep enough into the selection of projects before substantial money is committed," says Blackmon. "National Castings believes the validity and magnitude of preliminary investigations should measure up to the size of R&D budgets. We've got a substantial R&D investment at National Castings, and we've developed a system to rationalize and refine our approach to allocation of such efforts and resources."

Blackmon and other NC brass rather obviously expect diversification research to be a management aid to decision-making.

Riding herd over the project is the tall, sandy director of new products at NC's Technical Center in Cleveland, Wallace E. Baillie. He has the antecedents for the job. With degrees in both engineering and marketing, Baillie also has 20 years of experience in R&D management. The NC system for diversification research, in fact, is an adaptation of Baillie's MBA thesis, "The Management of Diversification in the Corporation."

• **Getting the facts.** NC's program is aimed at accumulation of a comprehensive body of information concerning the problems and needs of railroads. The program employs a retrieval system that will allow managers to look quickly at data needed for managerial decisions. Information needed for the system's input comes from technical papers, transcripts of industry meetings, trade magazines, technical journals and other published or written material.

Additionally, and perhaps most importantly, NC's system also contains the thinking, comment and opinion of top figures in the railroad industry that have been gotten via carefully structured interviews over a period of years.

The system has already provided these advantages to NC's researchers:

—Products in development have been corrected and upgraded.

—Directions of current R&D have been altered or reinforced.

—Priorities of research projects have been assigned more logically.

—Future directions for NC's applied research and product development have been established more soundly.

Says Baillie: "In actual practice, the system has upgraded our general intelligence on projects rather than provided dramatic new product identification. Current value is in the correction and upgrading of projects. Some changes are almost imperceptible—but vital—and some such changes are easily missed in preliminary stages. The system also reinforces our present R&D activities. It will eventually provide data that will suggest products for the future."

• **The focus is specific.** NC limits the system's focus to the operational area of railroading, so as not to dilute the data by too-general material. The division is concerned with changes or modification of railroad operational techniques that can influence new product development. NC feels that signs of such changes can be identified beforehand and that effective information can be gotten from sources that know what is happening (often the men who help make things happen in rail operations).

NC stalks such experts through various agencies, including the company's own technical and sales people. Baillie says, "We seek competent people matching a predetermined profile of our informational need."

What then? "We plan a structured interview. We develop questions as objectively as we can—to provide our researchers with a wide range of basic, specific information in well-defined areas."

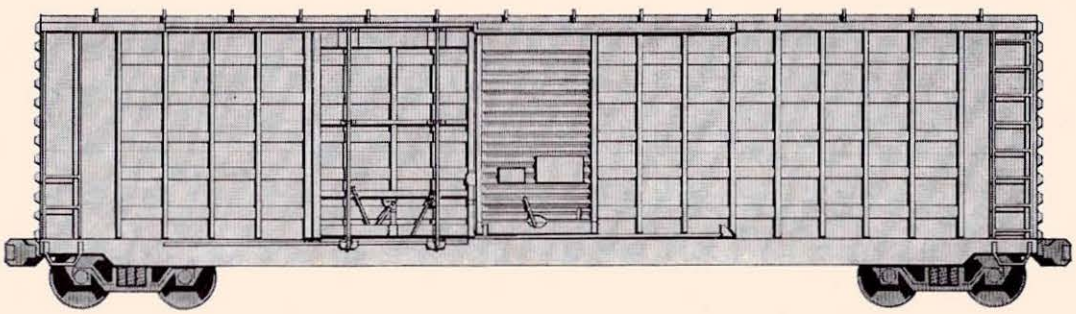
• **'Entirely scientific.'** "We tailor the interview to the man, to his particular area of competence. We send him an outline of the questions in advance, so he can prepare for them if he so chooses. Interviews are entirely scientific. We make no pitch of any kind

New equipment needs are discussed by National Castings' Wallace E. Baillie (left), and Ivan Ethington, the Burlington's vice president (operations).

Refining the approach to railroad new product development

Retrieval of data from Keydex system at NC's research center is simple matter after information is coded into system.

Here's a way you can beat the Investment Tax Credit moratorium...



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for National Castings or have any commercial intent of any sort. We assure our sources that all their comment will be coded so that they can neither be identified or directly quoted. And, of course, none of the information would ever be used for either advertising or word-of-mouth selling."

Baillie says the willingness of subjects to respond is based upon their recognition of the fact that NC is trying to identify their needs better and that such activity is in the long-range interest of developing the best possible tools for the railroad industry. "Our work is aimed at lowering transportation costs, at having goods arrive undamaged, at increasing efficiency—these are all factors that fascinate such experts as we talk to." Interviews range in length from one to three hours.

How is such information handled? "We handle it as we do published material. We continually scan such material and break it down into information bits. All such information is coded and entered into a Royal McBee Keydex information retrieval system. This enables us to find every document in our files that bears upon a subject in a matter of minutes."

● **Assigning priorities.** "We use the system for all open projects and for advanced planning. It helps us assign priorities to projects. Even when projects are obvious it helps reinforce our decisions by suggesting the form they should take. We feed information back into projects under way and this helps develop points of view, useful in project planning and control."

Asked for a specific example of the system's contribution to NC's R&D effort, Baillie retreats into the researcher's caution. "Well, a while back our management asked whether we should undertake development of a particular product. We had been building information in the area. Our system indicated many periodical references and interview data.

"By synthesizing the material we gave management a comprehensive perspective of the over-all value of the product possibility. Analysis of the project included a market research study conducted by the sales side and estimates of cost and time factors—all of which led to a recommendation based upon the return on investment needed for such a project."

● **Cooperation is good.** NC reports gratifying cooperation from railroad sources. A spokesman notes the approach has broadened and amplified NC's own perspectives as it enables the firm to penetrate into the origins of changing railroad operational requirements as they respond to changes in the transportation marketplace. ■

PFE challenges the future

(Continued from page 35)

made liquid nitrogen available at a reasonable cost. This is now being actively tested in refrigerator cars and trailers to determine if this type of refrigerant can be made economical and practical for all types of fresh fruits, vegetables and other foodstuffs.

● **Tested in trailers.** PFE has 15 liquid nitrogen cars under test and is testing the system in trailers. Schley says, "It is still too early to tell just what this may offer for the future of perishable transportation, but the next year or so should give a fairly clear picture."

Another development offering further protection for fresh fruits and vegetables in transit, and serving to extend their shelf-life, are two types of controlled-atmosphere systems. In the first, liquid nitrogen is used to purge the loaded vehicle of most of the oxygen in the atmosphere within the lading compartment. This creates an atmosphere that reduces respiration of fresh perishables, which in turn serves to delay the ripening process. In addition this feature also permits harvesting the produce at a later stage in its development, offering a higher quality product.

PFE is currently acquiring 98 new highway trailers using this controlled-atmosphere system. Called Oxytrol, the system is manufactured and served by the Oxytrol Division of Occidental Petroleum Corp. The system provides an additional supply of liquid nitrogen aboard the trailer to maintain the reduced oxygen-level while the shipment is in transit.

Another approach to the controlled atmosphere service is the Tectrol system furnished by TransFRESH Corp., a licensee of Whirlpool Corp. More than 300 PFE trailers are equipped for Tectrol service. TransFRESH has also been furnishing this service, on shippers' orders, in new PFE mechanical reefer cars. The system provides for adjustment of the proportions of oxygen, nitrogen, carbon dioxide and other atmospheric elements within the lading compartment after the equipment has been loaded. The compartment is then sealed to maintain this special atmosphere through to destination.

● **Arranged by shippers.** In both instances although PFE-SP-UP furnishes the equipment suitable for controlled atmosphere service, shippers make arrangements directly with the supplier firms.

Full effectiveness and value of these systems is yet to be determined from both product protection and economic standpoints, Schley says. However, PFE and USDA engineers are monitoring developments closely.

Schley says, there are now approximately 16,500 mechanical refrigerator cars throughout the nation, of which PFE has some 8,200. Additionally, work will soon start on 1,000 more mechanical cars ordered for 1967. Along with the acquisition of more mechanical cars and piggyback trailers, PFE is allowing the ice-bunker fleet to phase out as the older cars reach rebuilding or retirement age.

"We are finding less and less enthusiasm for the ice-bunker car among fresh-commodity shippers," says Schley. "They want the larger-capacity cars with positive controlled temperatures." When will the ice bunker car completely phase out? Speaking for PFE, Schley says, "We do not intend to build any more ice bunker cars nor do we intend to spend substantial sums of money in keeping the older cars in service."

● **Air transport competition.** Calling attention to the rapid increase in air transport, Schley says. "This mode of transporting perishable commodities has been showing a tremendous percentage growth, even though the volume of commodities thus far moved has been of minor consequence in the over-all tonnage moved. Strawberries and cut flowers have been the main perishable products moved by air. There have been some shipments of berries, asparagus and even lettuce when market conditions are high enough to warrant the greater cost of air transport. Air freighting of perishables is bound to grow in the future as planes become larger and larger. We are fully cognizant of this potential competition.

"Likewise, we all know that the trucking industry has made substantial and serious inroads in taking perishables off the rails. Highway transport will continue to play an important part in the picture. In my estimation, however, with the new large-capacity and efficient mechanical cars being placed in service by railroads and carlines, together with the growing fleet of piggyback trailers, I believe railroads will continue to play a very important part in transporting perishables in volume quantity.

"I feel with the constantly increasing population of the country, with more and more mouths to feed, the perishable business will continue to grow. There will be plenty of room in the field for all three modes of perishable transport. Each will find its own economic level through constant attention to costs and efficiency in doing the job better. This is what we are striving for at PFE and in the railroad-carline industry in general." ■

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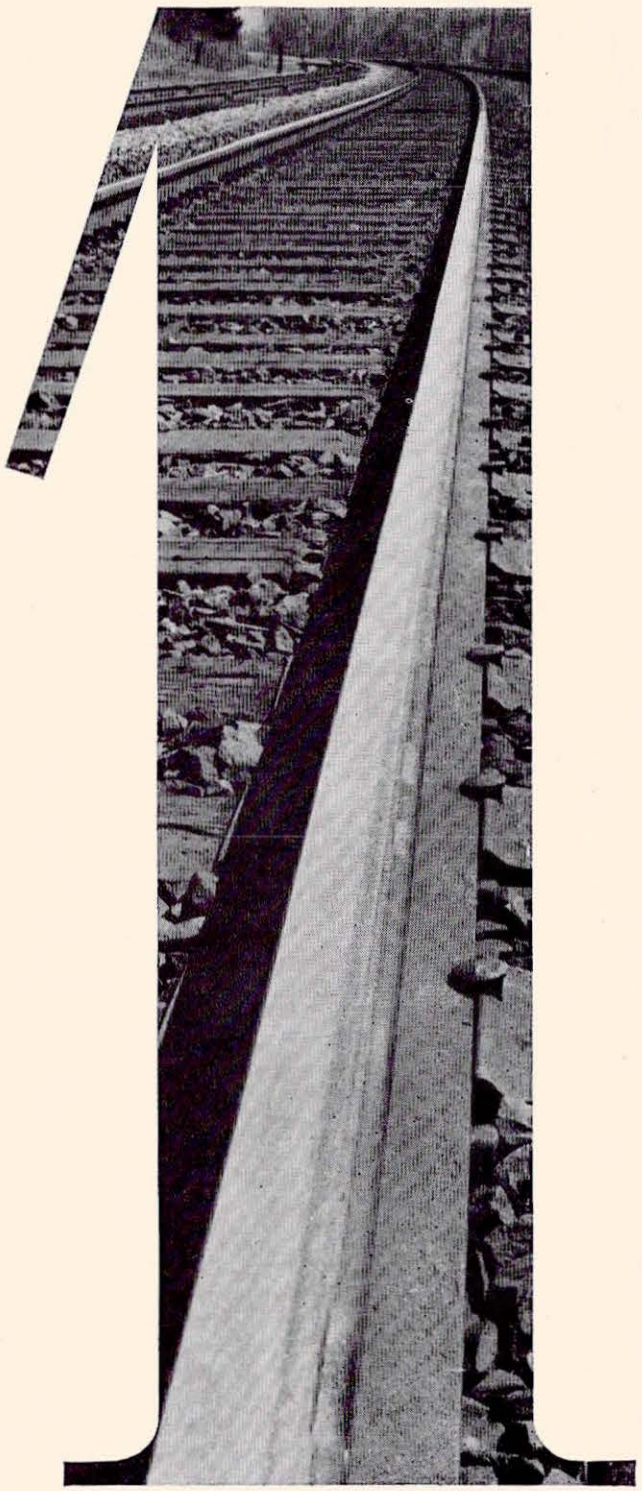

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MONEY TALK

BY JOHN MITROS

The market: Looking past railroad uncertainties?

Railroad chieftains with their eyes glued to the sideways performance of their industry during the first weeks of '67 see a fog of uncertainty ahead. But the careful men who scrutinize the stock market for a glint of gold between the fractions that chart the ebb and flow of securities' prices seem to be seeing something else down the track.

Since Jan. 1, rail shares have displayed unusual strength. Rail shares have been notable even in the rising market that has prevailed since President Johnson spelled out rising military outlays, easier money and the Administration's commitment for both guns and butter in his State of the Union Message earlier this month. Substantial blocks of rail shares (Santa Fe, Gulf, Mobile & Ohio, Seaboard Air Line and others) have moved into the portfolios of professional investors in recent weeks. Such investor faith in railroad issues is in sharp contrast to the apathy prevailing toward the same issues only a few weeks ago.

Comeback after decline

When the bears took over early in '66, the industrials lost about a fourth of their value before stabilizing—but the rails lost almost a third of the value they had at the '66 highs. So, rail issues had a longer way to travel before anyone could talk of recovery on the upside. But, still, look at what happened during the first three weeks of January.

Prices for the shares of a number of railroads jumped between 20 to 30%. Northern Pacific, for example, went from $46 1/8 to $55 1/8. Chicago & North Western common started the New Year at $85½ and climbed to $106¼ on Jan. 1. Erie Lackawanna went from $7 7/8 to $9 3/8. Soo Line rose from $37½ to $47⅞ during the same three-week period.

Not that these roads led the list of rails posting gains. Far from it. A strong whiff of speculative interest sparked 30 to 40% gains in the prices of some industry shares. Milwaukee common, for instance, ended '66 at $35⅛ and sailed to $47⅝ on Jan. 1. Chicago Great Western common went from $56 to $73. Florida East Coast, after closing the old year at $6⅞, went to $9⅜ three weeks later. Katy rose from $5⅝ to $7¼ in the same period.

Many other roads checked in with gains in the 10-to-20% range during the same three weeks. Santa Fe, Denver & Rio Grande Western, Chesapeake & Ohio, Chicago & Eastern Illinois, Great Northern, GM&O, Lehigh Valley, Louisville & Nashville, New York Central, Norfolk & Western, Pennsylvania, Southern, Union Pacific, Southern Pacific and other roads matched or improved upon the gains made by the market generally during the first three weeks of January.

By last week, as the market began a sidewise movement that baffled the experts who expected some sort of consolidating sell-off, the rails continued to display strength. Illinois Central Industries spurted up to 82 on news that a dividend increase and a split may be in the offing, and other rail issues continued to gain fractionally in a market that was remarkably stable during the last week of January. The Dow Jones rail average continued to hold above 227, after closing '66 at about 200.

Reward for a record year?

Railroad balance sheets aren't sexy enough to account for the change in January. The same balance sheets have been telegraphing "record year" since mid-'66—as rail shares continued to drop. Some market experts explain the January rises with the marvelous mumble they have perfected as a means for insulating investors from facts: (a) the rise is due to a generally improved market, (b) it's due to investor fear of short-term inflation, (c) or long-term inflation, and (d) the rises are a reaction to the market's overly pessimistic assessment of railroad prospects in '66. Anyone with a tendency toward vertigo should be wary of such whirling with words.

Are there facts known or intuited by investors behind the January bidding-up? Knowledgeable rail analysts (and there probably aren't more than a dozen such) have been preaching a gospel of industry recovery to their large institutional clients for some time. Their pitch is based upon facts that could be enough for sustained investor interest in rail securities. They note that rail victories in the war against competition have both stabilized the rail share of national freight tonnage *and* sent rail production of transportation to record levels. Rail tonnage is wired to the rails as it has never been wired before. Incentive rates, special equipment, and market insights have transformed distribution practices of entire industries (utilities, coal, autos, chemicals, and agriculture, for example) and benefited railroads handsomely. Industry marketing efforts, coupled with the marketing efforts of major car-leasing companies, are adding to this core of "wired" traffic as other major industries prepare to harvest the cash that can be saved by switching high-cost highway and private carriage tonnage into railcars. Some observers, in fact, think this "wired" traffic is so substantial a part of the rail mix that railroading comes close to being recession-proof. And it hardly takes a top-flight analyst to see that rail internal efficiency is at an all-time high—and getting better with the delivery of every high-cube car and every high-horsepower locomotive. Piggyback, more sympathetic treatment by government, mergers-in-the-making and rising managerial virtuosity add more luster to railroad prospects.

Is rise based on a hunch?

Investors, of course, could be buying rails because many issues are the bargains of the era by practically all standards investors use—return, safety and growth potential. One analyst told this writer recently, the brasher optimists may yet turn out to be "cowardly prophets" because they "fail to see, by a wide margin the rail potential building up in the economy because of the changes in the technical, economic and service relationships between railroads and shippers."

Or are institutional buyers figuring that railroads know best about railroads? Railroads are among the most active buyers (and holders) of rail shares.

Or is reviving investor interest based upon the rails' record as activists since the Fifties? Many thoughtful investors are more interested in the *rate* of rail change and recovery than they are in the indices of industry output. Goethe's observation that nature knows no pause in growth and development, but attaches her curse to all inaction, seems appropriate to many as a guide to investment. The rails qualify.

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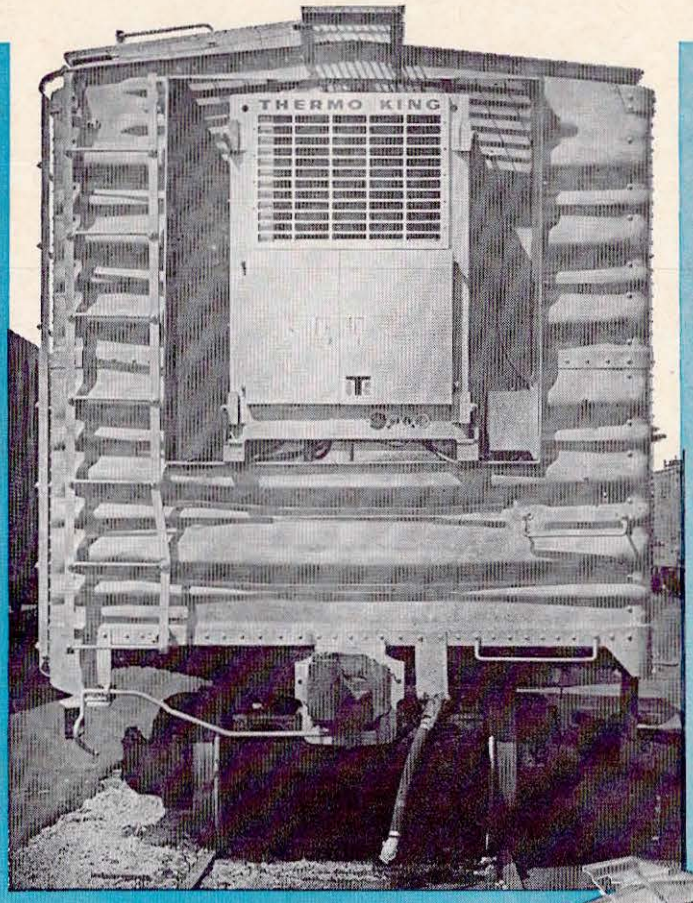

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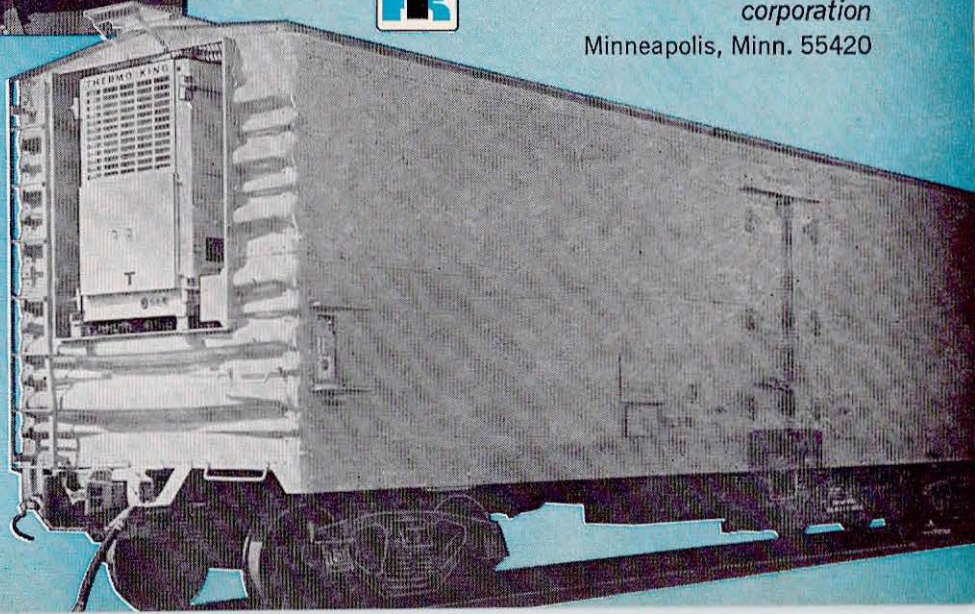

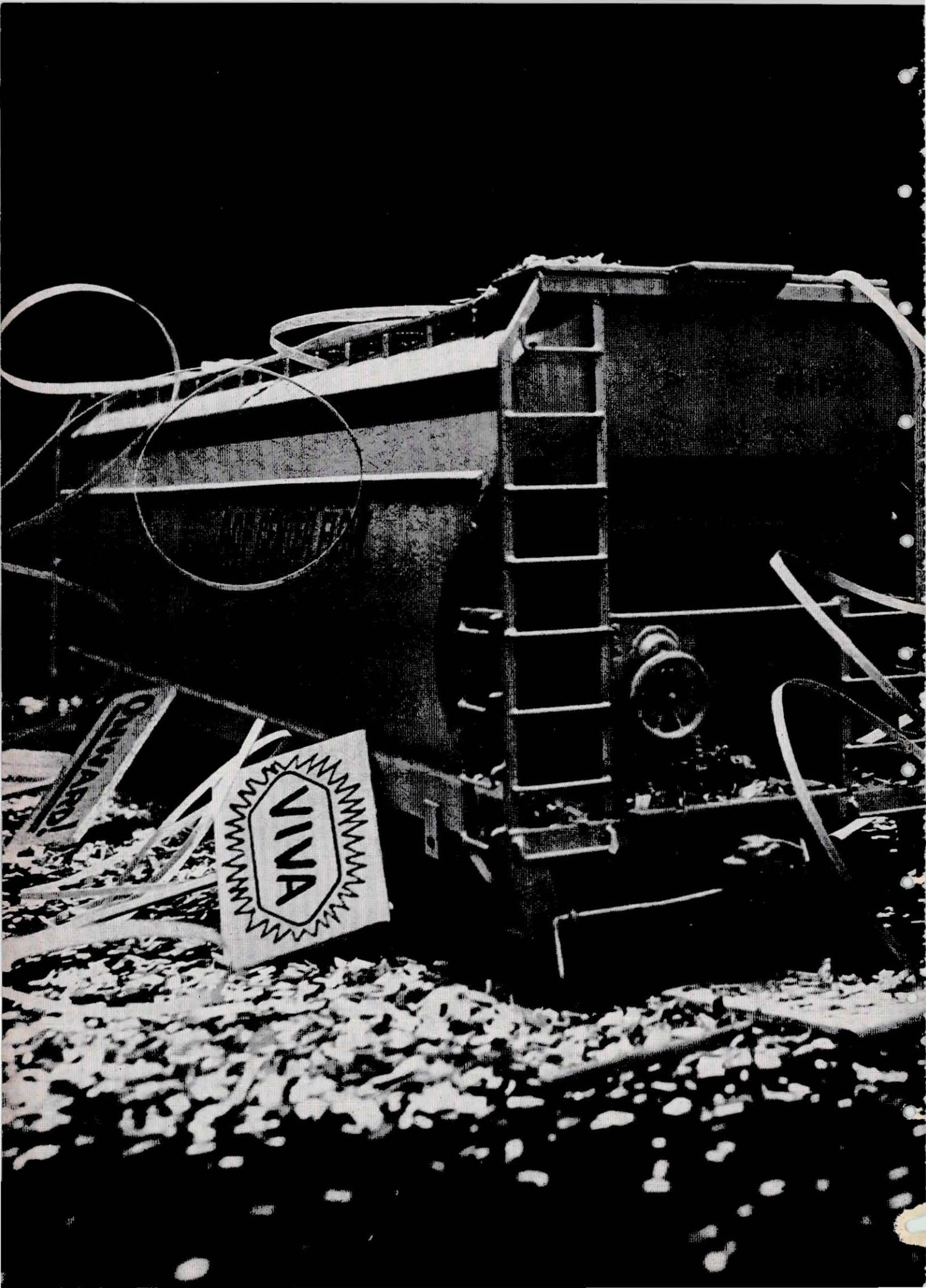
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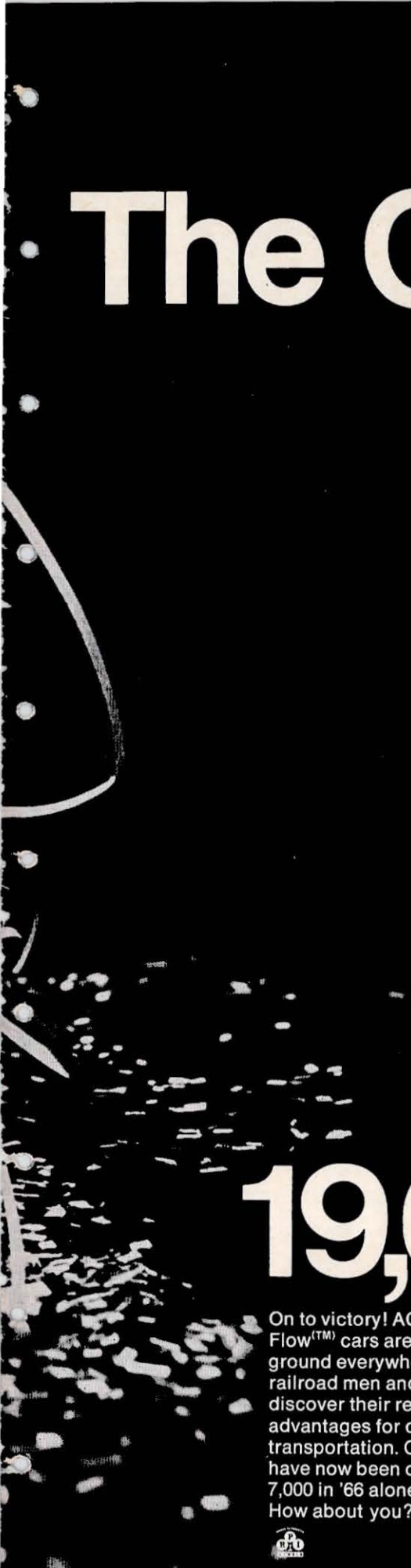

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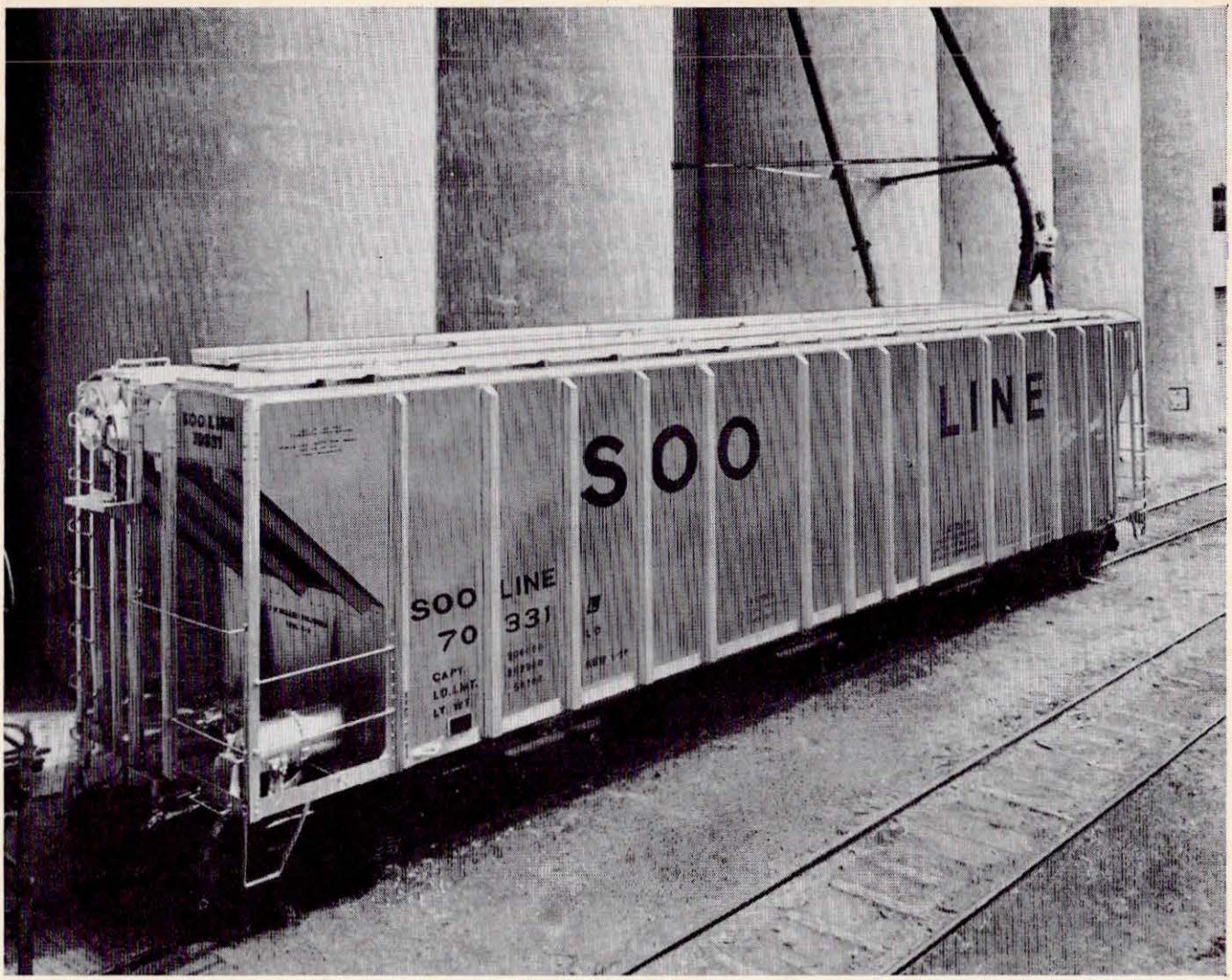

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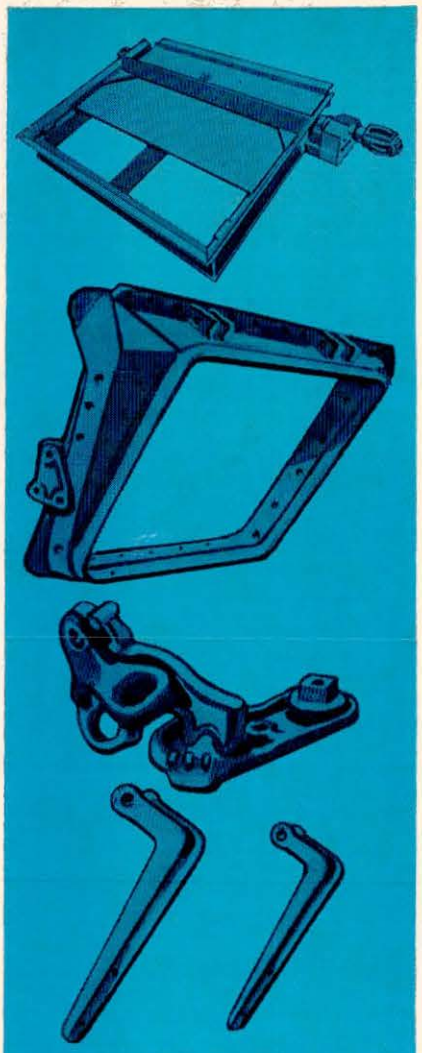

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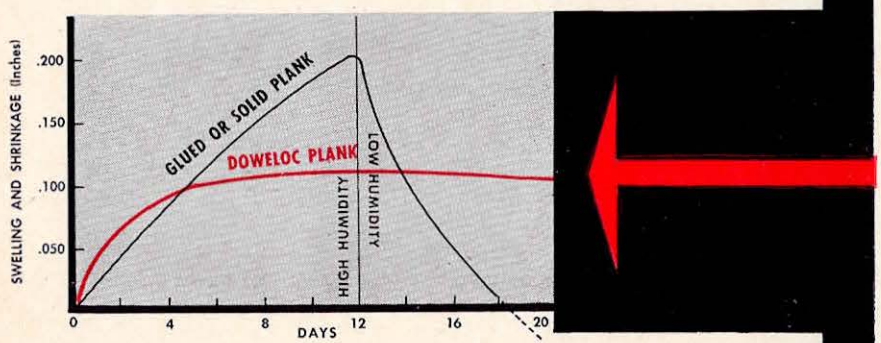

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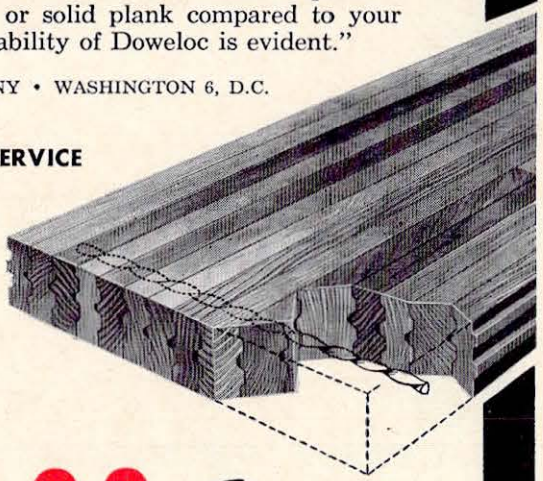

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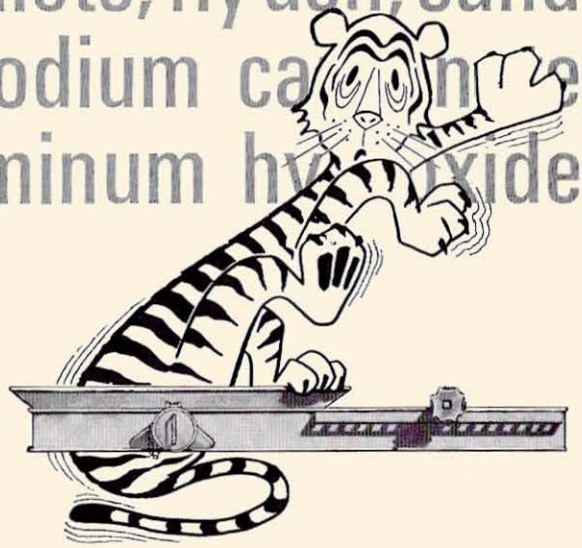

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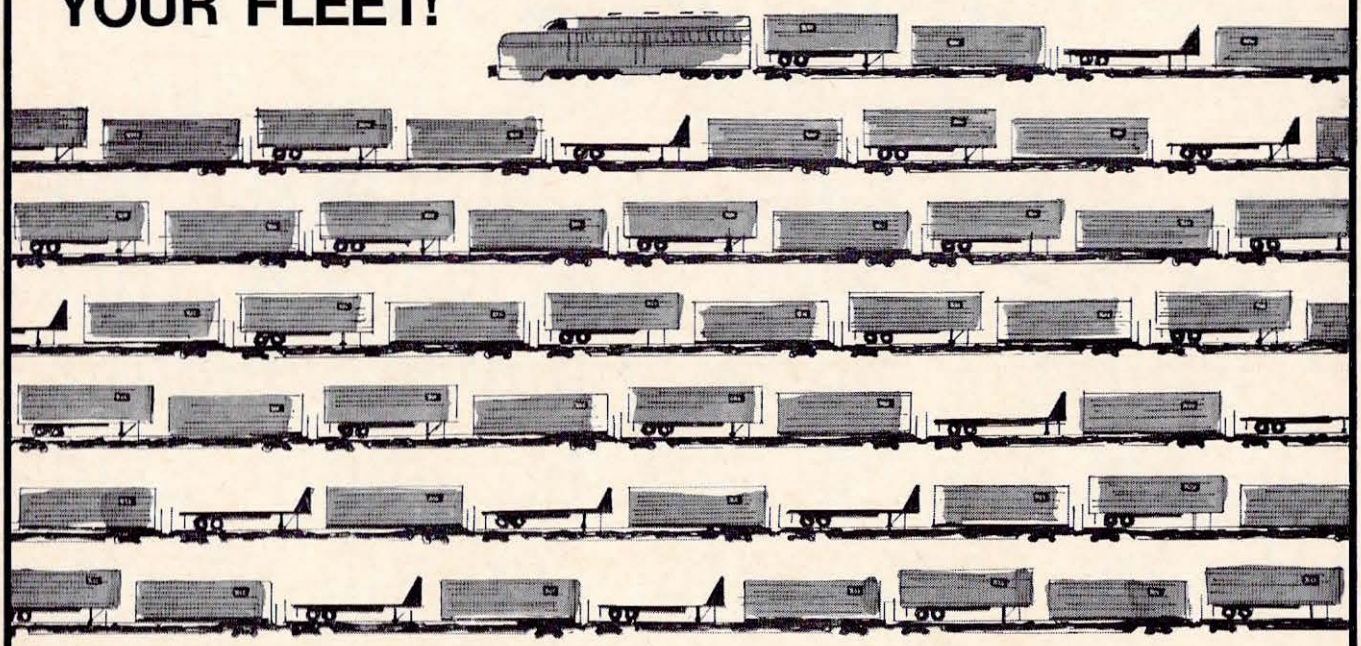

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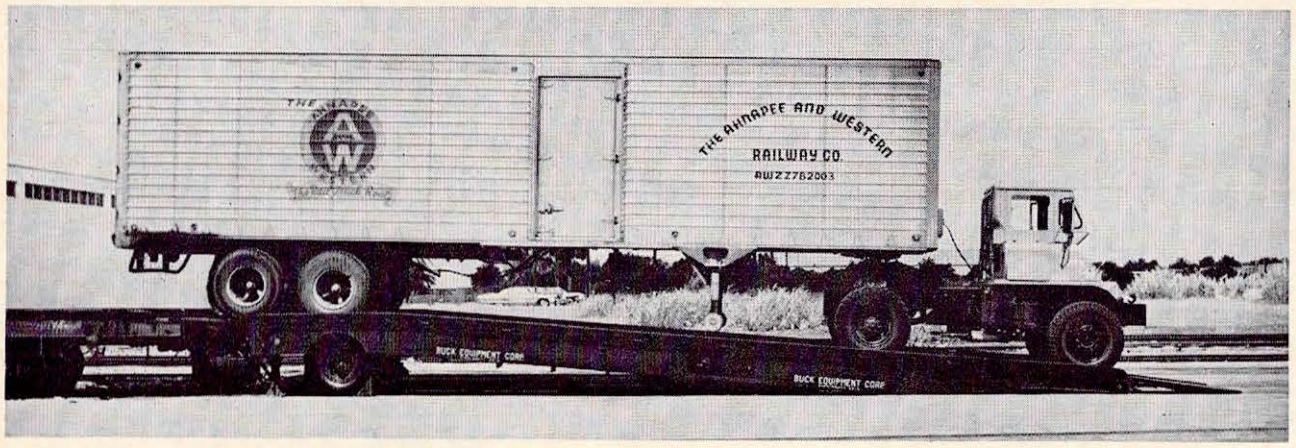

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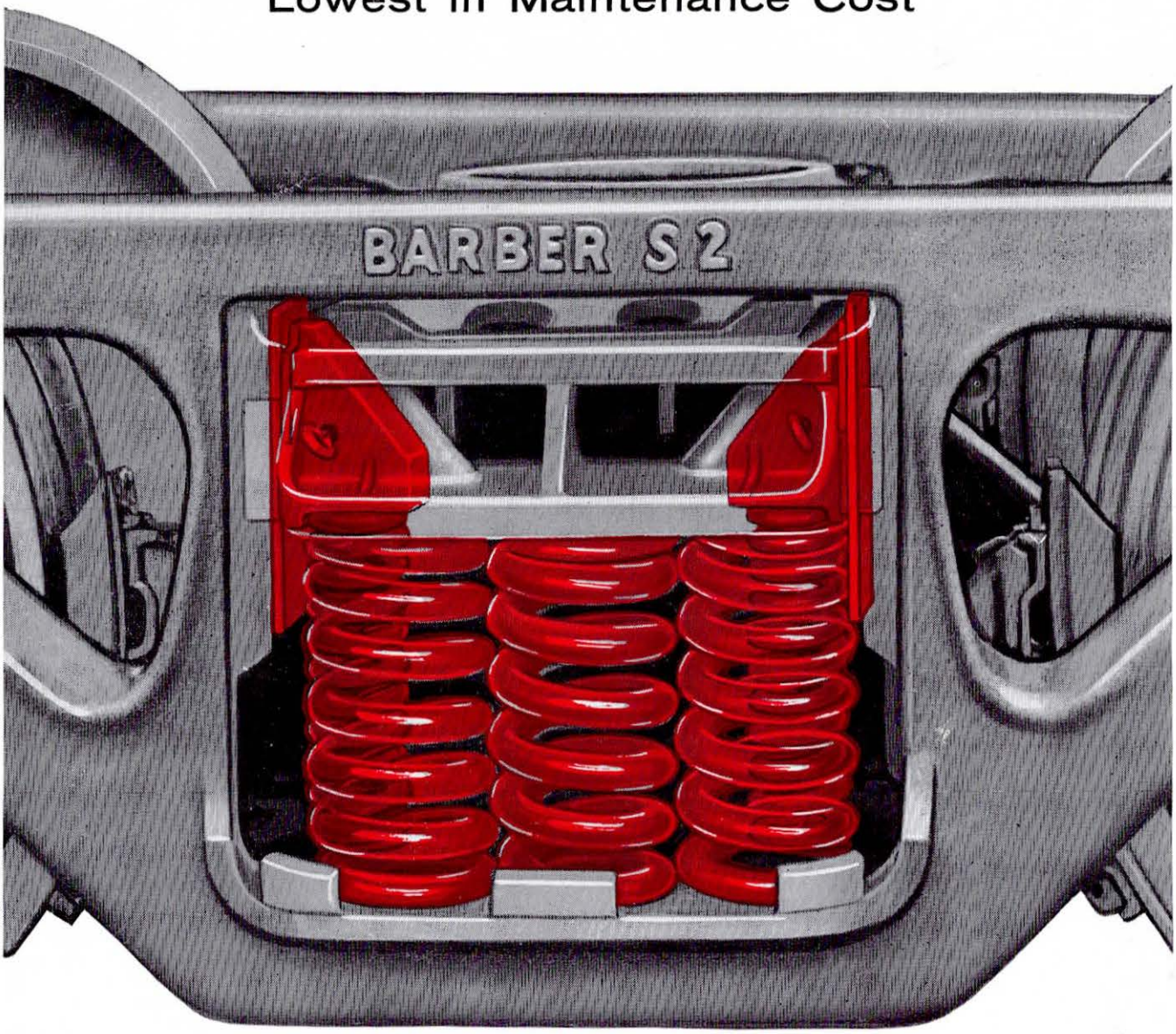

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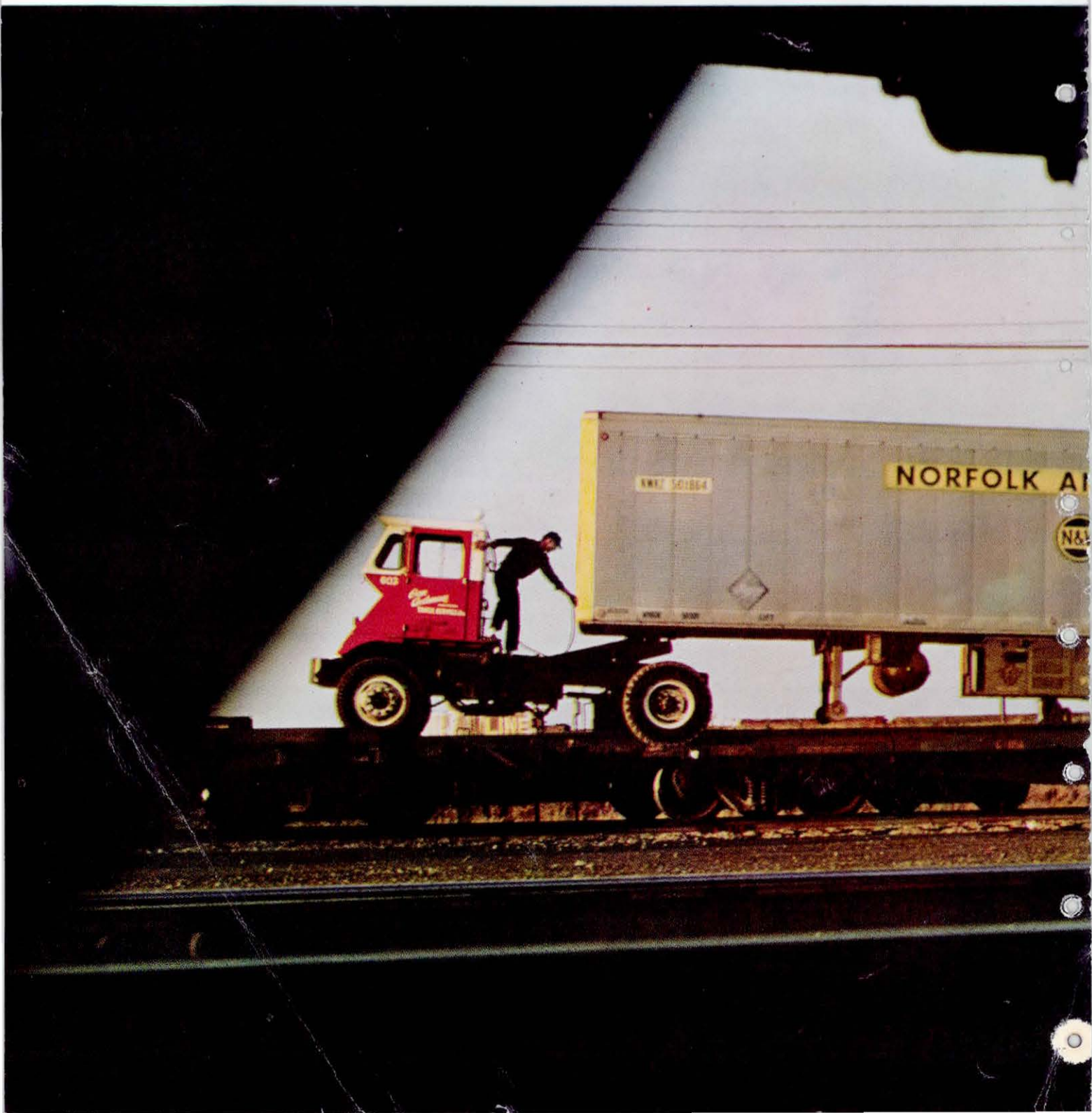

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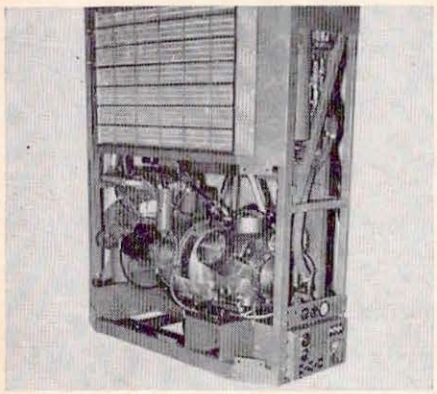
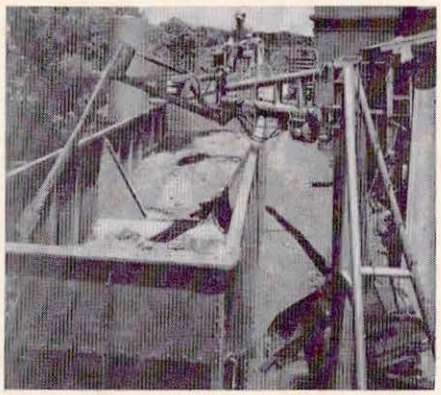


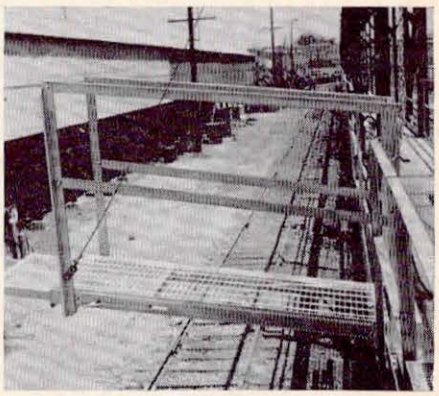
Refrigeration Units (RA-1)

Components of trailer refrigeration-heating equipment requiring regular service are readily accessible in Models 645 and 655 belt-drive nosemounts. Both units are diesel-powered and hold temperatures between −20 and +80 deg F in extreme ambient temperatures, with a maximum variation of plus or minus 2 deg. Evaporator needs no defrost shutters. Tanks hold 50 gallons of fuel. Units match in capacity electric-drive Models 640 and 650 but will not replace them. *Transicold Corp.*



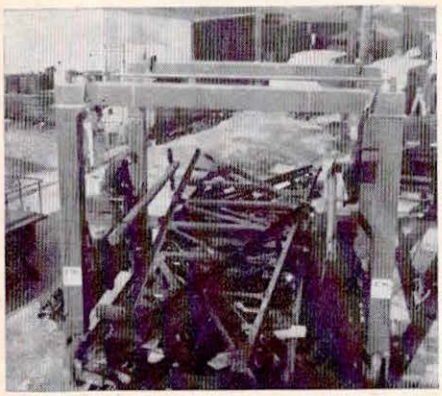
Trackside Unloader (RA-2)

The "left-hand" trackside hopper car unloader extends application of the Tuxhoe to twice as many locations as formerly. The 3,500-lb hydraulically operated unit operates from its own tower outside the car. Its three-way lateral swing allows operator to reach any part of car and to scrape it clean with a downward action without requiring a man inside the car. The foundation for the hoe can be placed in any of four areas near unloading pit. *Albert Products, Inc.*



Tank-Car Loading Ramp (RA-3)

The Romak adjustable tank-car loading ramp is designed so that a series of them lines up with all tank-car domes in a string of cars to allow one-stop loading and unloading. Each ramp is adjustable laterally 18 in. either way from center to suit size or position of car. Length is adjustable to 18 in. by means of an integral extension. Gratings are galvanized steel. For non-sparking purposes, aluminum gratings are available. Top rail is 3½ ft high. *Romak Iron Works.*



Gantry Cranes (RA-4)

An Acme line of self-propelled double gantry cranes is said to be particularly effective for handling prestressed concrete forms, steel shafts and rods, logs and heavy timber, large crates and containers. Winches are individually controlled. Each lift has five hoisting speeds, "60-sec sling or hook spacing" for individual load handling, and two driving speeds. Units range in capacity from five to 50 tons, with heavier capacities on special orders. *Acme Marine Hoist, Inc.*

Generators (RA-5)

Two new thermoelectric generators, with greatly increased power ratings are now available. The new model 530 3M brand thermoelectric generator is rated at 100 watts and the new model 540 generator is rated at 200 watts. All 3M brand thermoelectric generators are capable of producing either 6, 12 or 24 volts DC. Four other models of thermoelectric generators are available that provide power levels of 9, 15, 23 and 50 watts. *3M Company.*

RAILWAY AGE
WEEKLY

30 Church Street, N.Y., N.Y. 10007 READERS' SERVICE (Att. George Johnson)

PLEASE SEND ADDITIONAL INFORMATION ABOUT PRODUCTS IN ADVERTISEMENTS NUMBERED: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38

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NAME ..... TITLE.....

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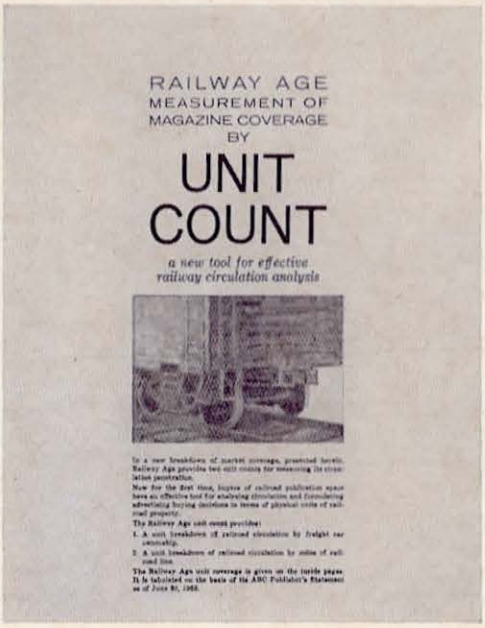
☐ **Please send information about subscribing to Railway Age**

TWO NEW AIDS

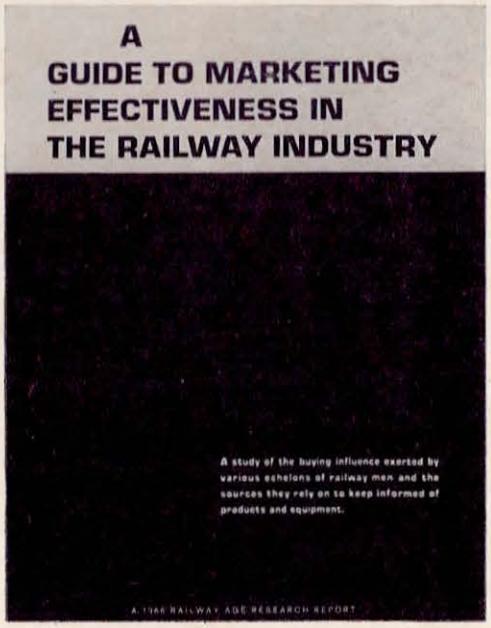
to advertising and marketing effectiveness in the railway industry



Railway Age now offers advertisers a new measurement of its circulation coverage and penetration, based on two unit counts of railroad property—freight car ownership, and railroad mileage. This new study shows how Railway Age reaches railroad buying power where it is of greatest importance.

It lists Railway Age circulation by 8 groupings of freight car ownership and by the same number of groupings of railroad line mileage. Circulation data for each grouping is presented in the exact occupational classifications shown in the Publisher's ABC Statement.

Available for the first time in the railway industry, this pinpointed analysis should provide a new dimension for the selection of railway advertising media.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GUIDE TO MARKETING
EFFECTIVENESS IN
THE RAILWAY INDUSTRY
A study of the buying influence exerted by various echelons of railway men and the sources they rely on to keep informed of products and equipment.
A 1966 RAILWAY AGE RESEARCH REPORT

Now available: A new study of railway buying influences and the sources railway men use to obtain product information. It provides answers to a wide range of questions designed to show *where* and *how* suppliers can best get through to the railroads.

This study should be immensely helpful in planning sales and marketing strategy. It has been obtained through a Simmons-Boardman Marketing Effectiveness Survey personally conducted among 276 management officers and supervisors on 28 Class I railroads and five transit lines.

Outstanding in the results of the survey is the top position occupied by railway magazines as sources of railway product information. These magazines rated high among all nine of the groups of railway men surveyed.

Write for your copies of these studies to Railway Age
30 Church Street, New York, N.Y. 10007—Attention: Robert G. Lewis, Publisher

RAILWAY AGE

INDUSTRIAL TRAFFIC

Michael J. Posig has been promoted to general traffic manager, **Thomas J. Lipton, Inc.**, Englewood Cliffs, N.J.

Rodman Kober has been appointed general traffic manager, **Louis Dreyfus Corp.**, New York.

Glenwood Cloud, assistant to traffic manager, **St. Joseph Lead Co.**, has been appointed traffic manager, Bonne Terre, Mo., succeeding **Fred A. Schwab,** who retires Feb. 1, after 29 years of service.

Blanton P. Bergen has returned to the staff of **James C. Buckley, Inc.**, industrial and transportation consultants, as senior consultant—industrial traffic. Mr. Bergen was assistant general traffic manager, **American Sugar Co.**

R. A. Gosline has been named western traffic manager, **Weyerhaeuser Co.**, Tacoma, Wash. **R. V. Caldwell** has been named manager of transportation planning and research. **R. T. Coughlin** has been appointed assistant western traffic manager. **Robert Bunker** has been named assistant eastern traffic manager, Camden, N.J. Traffic coordination for the plant at Albert Lea, Minn., will be handled from the Chicago office where **B. M. Fischer** is eastern traffic manager.

Garrett H. Smith, assistant to vice president —traffic, **Bethlehem Steel Corp.**, Bethlehem, Pa., retires Jan. 31, after 40 years in the traffic department.

DORALCO, transportation advisors, at P.O. Box 462, Clinton, Iowa, 52732, has been established by **A. C. Shaw,** who has had 11 years of railroad and Western Weighting & Inspection Bureau experience and 24 years as an industrial traffic manager.

Lloyd K. Baker has been appointed traffic manager, Paper Division, **Riegel Paper Corp.**, at Milford, N.J. succeeding **R. J. Helms,** retired. **James Roth** succeeds Mr. Baker as corporate traffic assistant.

Michael H. Swanson, traffic manager, Taylorville plant, **Allied Mills,** has been appointed supervisor of transit and billing, Transportation Department, **A. E. Staley Manufacturing Co.**, succeeding **R. G. Dickson,** resigned.

James C. Hitchcock has been named manager, Transportation and Traffic Analysis Department, purchasing staff, **Ford Motor Co.** He was formerly a senior buyer, Ford Division purchasing office.

SUPPLY TRADE

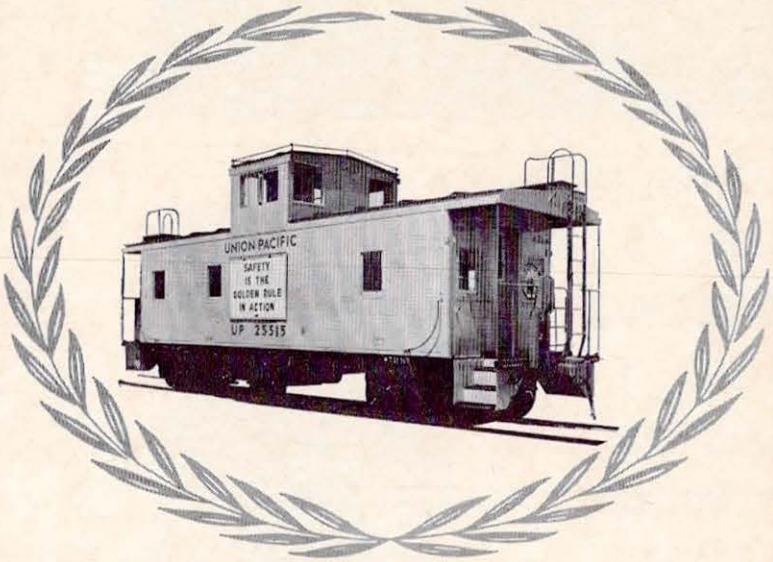
Earl W. Miller, operations manager, **Mannix International Inc.**, has been appointed acting general manager. **Nils Lind** named chief engineer. Mr. Lind was formerly project engineer in charge of hydraulics, **Tel-E-Lect, Incorporated.**

Fred M. Hodgdon has been named director of marketing, **Transco Inc.**

Donald W. Saurer has been promoted to manager, technical information, **Lord Manufacturing Co.**, division of Lord Corp., Erie, Pa. Mr. Saurer will handle advertising and public relations functions.

UNION PACIFIC RAILROAD

RE-ORDERS INTERNATIONAL CABOOSES



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As the world's largest independent caboose builders, we publicly and gratefully acknowledge Union Pacific's expression of confidence in our understanding of the needs of both railroad management and the railroad brotherhoods in the area of caboose construction.

Other railroads that have consistently re-ordered International Caboose Cars include the following: *B&M, BRC, C&EI, CBQ, CNW, CRIP, D&H, EJ&E, GBW, GM&O, GN, GTW, LIRR, MEC, SAL, SOO, SP, SSW, TRRA.*

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Other railroad subsidiaries of Nationwide Industries, Inc.
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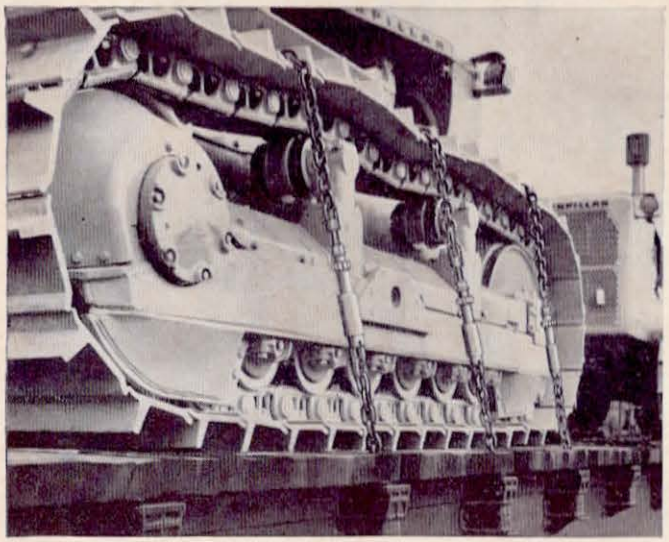
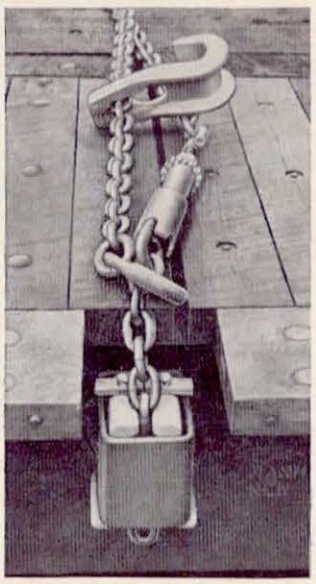


TRACTORS, TANKS, CRANES, TRUCKS, BULLDOZERS, GRADERS, CONTAINERS, AND MILITARY EQUIPMENT



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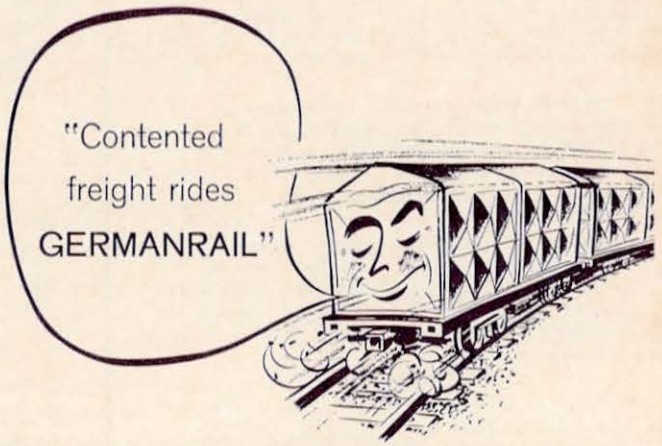

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JOACHIM WENZEL, GENERAL REPRESENTATIVE

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MARKET OUTLOOK

Carloadings

Loadings of revenue freight in the week ended Jan. 21 totaled 528,264 cars, the Association of American Railroads announced on Jan. 26. This was a decrease of 13,929 cars, or 2.6%, compared with the previous week; a decrease of 8,123 cars, or 1.5%, compared with the corresponding week last year; and an increase of 5,518 cars, or 1.1%, compared with the equivalent 1965 week. Ton-miles generated by carloadings in the week ended Jan. 21 are estimated at 13.8 billion, an increase of 1.8% above the corresponding week of 1966, and 11.1% above the 1965 week.

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, Jan. 21

District	1967	1966	1965
Eastern, including Allegheny and Pocahontas ..	211,115	214,408	209,296
Southern	114,631	114,469	105,953
Total Eastern and Southern Districts	325,746	328,877	315,249
Northwestern .	57,177	61,022	61,894
Central Western	107,881	108,260	110,073
Southwestern .	37,460	38,228	35,530
Total Western Districts	202,518	207,510	207,497
Total All Roads	528,264	536,387	522,746
Commodities:			
Grain and Grain products	52,057	59,796	46,001
Livestock	1,529	1,721	2,320
Coal	112,018	108,332	104,268
Coke	7,164	8,381	9,194
Forest Products .	38,852	39,282	38,146
Ore	16,359	15,437	15,793
Merchandise l.c.l.	5,190	6,734	9,737
Miscellaneous .	295,075	296,704	297,287
Jan. 21	528,264	536,387	522,746
Jan. 14	542,193	544,556	532,367
Jan. 7	451,457	508,282	531,058
Cumulative total, 3 weeks	1,521,914	1,589,225	1,586,171
Estimated revenue ton-miles (billions) 3 weeks ...	39.6	40.3	37.6

PIGGYBACK CARLOADINGS—U. S. piggyback loadings for the week ended Jan. 14 totaled 22,561 cars, compared with 19,116 cars in the corresponding 1966 week. Loadings for 1967 up to Jan. 14 totaled 40,384 cars, compared with 37,295 cars in the corresponding period of 1966.

IN CANADA — Carloadings for the seven-day period ended Jan. 7 totaled 60,182 cars, compared with 80,358 for the previous ten-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Jan. 7, 1967	60,182	20,727
Jan. 7, 1966	58,780	21,268

FREIGHT TRAIN CARS

► *Rock Island.*—Ordered 1,500 covered hopper cars at a total cost of $20,625,000. Pullman-Standard will build 1,000 100-ton cars for delivery beginning in April; ACF will build 500 Center Flow cars for delivery beginning in May. The P-S cars will be used in grain service and will be designed to be used to carry alumina and similar products. The cars to be built by ACF will be used primarily to haul heavy commodities such as fertilizer, cement, sand, ore and minerals, but can also be used to carry grain. The car orders are part of Rock Island's $95.4-million equipment program for 1966-67.

CAPITAL EXPENDITURES

► *Bangor & Aroostook.*—Initial plans call for capital expenditures this year totaling $1,215,400, including $780,200 for new equipment and $435,200 for new or improved facilities.

► *Delaware & Hudson.*—Will spend $6 million this year for 6 3,000-hp diesel-electric locomotives from General Electric; 200 70-ton box cars with load restraining devices and cushioned underframes; 4 cabooses; and 28 motor vehicles for maintenance and service work. D&H also plans to replace 19.4 miles of rail with continuous welded and/or heavier rail. Ten bridges will be replaced with new structures to increase load-carrying capacity, and clearances will be improved in the rock tunnels at Ticonderoga and Willsboro, N.Y.

► *Frisco.*—Planned expenditures of $22 million in 1967 (including $16.3 million for equipment) will be slightly below 1966's $23.3 million, of which $15.5 million was spent for equipment.

NEW FACILITIES

► *Alberta Resources Railway.* The 111-mile line being built by Canadian National to serve the Smoky River coal deposits in northern Alberta province will be extended 80 miles. The first segment of the line is being built from Solomon, on the CN main line, to Grande Cache, a new town being developed in a coal field whose estimated deposits are some three billion tons. The ARR is being financed by the Alberta government to serve mines that will produce high-quality coking coal for use in the Japanese steel industry. It was reported that several Japanese steel mills will be converted to use the Smoky River coal, and that agreement with Japan, involving shipments by two 80,000-ton Japanese vessels, will be reached this summer.

► *Candian Pacific.*—A $2-million automated freight terminal in Toronto that was built by CP for a shippers' association made up of department and chain stores and other retailers, is now in operation. Freight brought in by truck is loaded on electronically-controlled carts on rails and distributed throughout the terminal to waiting railroad cars.

FOREIGN

► *Chihuahua al Pacifico.*—Ordered 15 85-ft, 88-passenger coaches from Constructora Nacional de Carros de Ferrocarril, S.A.

YOU OUGHT TO KNOW

Coal shipments to France: A new 87,000-ton French ship, reportedly the largest coal-carrying vessel in the world, sailed into the Chesapeake Bay on its maiden voyage last week to take on coal for France. The Cetra Columba is scheduled to haul a million tons of coal a year in regular monthly runs from Newport News to Le Havre. Last week, the ship picked up coal from the Chesapeake & Ohio's Pier 14 at Newport News, and from Norfolk & Western's Pier 6 at Hampton Roads. When channel-deepening operations are completed in October, the ship will get its full loads from the C&O pier.

NYC'S Perlman honored: The New York Foreign Freight Forwarders and Brokers Association has named New York Central President Alfred E. Perlman its "Man of the Year" for contributing materially to the movement of foreign commerce via the port of New York. In accepting the award, Perlman said NYC's overseas Flexi-Van shipments had increased 357% for the first 11 months of 1966 over the corresponding 1965 period.

Motel rooms on railroad flats: There's a good chance that many of the motel rooms at Canada's Expo 67 world's fair this year will have traveled farther to get to the fair than some visitors. Some 1,728 easily-assembled motel units will be shipped to the Montreal fair site from British Columbia by the Canadian National to help ease the room shortage in the city during the big exposition. CN has already begun shipment of 45 disassembled units daily on 15 flat cars for Coast Homes Ltd., which has a $3-million contract to provide the rooms for 1,000 Motels, Inc. Each unit is 18 feet long, 12 feet wide, and 10 feet high, and costs $1,700 furnished. Forklift trucks will move the units from the flat cars to the erection site, where they will be assembled in groups of eight. In October, when Expo closes, the motel units will be disassembled and sold.

RPI sales session planned: Railway supply company sales personnel will meet in Oshkosh, Wis. Feb. 12-15 for the 1967 Railroad Sales Development Seminar sponsored by the Railway Progress Institute. The program will include general sessions and small workshop groups for informal discussions. RPI's Committee on Executive Development will conduct the program.

Ton miles near 2 trillion mark: The five modes of transportation ran up a total of 1.8 million intercity ton miles in freight operations last year, according to figures released by the Transportation Association of America. ATA's breakdown (in billions): rail, 757; truck, 396; pipeline, 332; barge, 158; Great Lakes, 115; and air, 2.3.

IC's think-factory: Illinois Central's employee suggestion system, inaugurated in 1939, keeps humming right along — with no sign that IC people are running out of prize-winning thoughts. The box score on 1966: 6,201 ideas submitted, 1,405 adopted, $23,860 paid out in awards. Since '39, the system has produced more than 525,000 ideas—and close to 100,000 have found their way into practice.

Central adding night trains: Five experimental "Night Owl" passenger trains will begin running on the New York Central's Harlem Division Feb. 1 as a result of recent surveys made by the Central. The test runs, which will give the road uninterrupted 24-hour commuter service, will be provided seven days a week until April 30. At that time its public acceptance will be evaluated. Three trains will run from Grand Central to North White Plains, at 3:00, 4:00 and 5:00 A.M. —and two will go from North White Plains to Grand Central. The service will accommodate late-night workers, theater-goers and others.

Truck tonnage: Intercity truck tonnage in the week ended Jan. 14 was 19.5% above that of the previous week, and 1.7% ahead of the volume in the corresponding week of 1966, according to American Trucking Associations.

Current statistics

Net Income	
9 mos., 1966	$658,000,000
9 mos., 1965	542,000,000
Carloadings, revenue freight	
3 wks., 1967	1,521,914
3 wks., 1966	1,589,225
Freight cars on order	
Dec. 1, 1966	56,437
Dec. 1, 1965	42,089
Freight cars delivered	
11 mos., 1966	81,849
11 mos., 1965	70,110
Serviceable cars	
Dec. 1, 1966	1,420,553
Dec. 1, 1965	1,397,160

Eric P. Stephenson
CN

Keith E. Hunt
CN

Albert F. Hatcher
Rock Island

Harold E. Meeker
WP

PEOPLE IN THE NEWS

CANADIAN NATIONAL.—Eric P. Stephenson, general manager, Great Lakes Region, Toronto, Ont., appointed vice president, Prairie Region, Winnipeg, Man., succeeding **W. C. Bowra,** recently named system vice president, Montreal (RA, Dec. 19/26, p. 66).

Keith E. Hunt, manager, London Area, succeeds Mr. Stephenson at Toronto. **Charles F. Armstrong,** operations manager, London, succeeds Mr. Hunt. **Ross A. Walker,** operations manager, Northern Ontario Area, Capreol, succeeds Mr. Armstrong.

CHICAGO SHORT LINE RAILWAY.—E. A. Peloza appointed assistant superintendent, Chicago.

ROCK ISLAND.—Albert F. Hatcher, chief traffic officer, elected vice president-traffic.

SOUTHERN FREIGHT ASSN.—Bates Bowers, general traffic manager, Savannah Sugar Refining Corp., will join the Southern Freight Assn. March 1 as vice chairman. Upon retirement of **R. E. Boyle, Jr.,** at the year's end, Mr. Bowers will succeed Mr. Boyle as chairman, effective Jan. 1, 1968.

UNION PACIFIC.—Appointments at Portland, Ore.: **Robert D. Toomey,** assistant traffic manager; **C. B. Welker,** general agent, freight department; **F. M. Baird,** district manager of trailer traffic.

Alex G. Proskurniak named general traffic agent, Vancouver, B.C., Canada.

WESTERN MARYLAND.—Robert C. Bresenhan, assistant to the manager—foreign commerce, Baltimore, promoted to assistant manager—foreign commerce, New York, succeeding **John Krznaric** (RA, Jan. 23, p. 37.). **John B. Clapperton,** foreign commerce representative, Baltimore, succeeds Mr. Bresenhan.

The following title changes have been made in the Marketing Division, Sales Department: **C. N. Collins,** manager, freight rates, named manager, pricing. **W. C. Sinners** and **P. D. Baer** named assistant managers, pricing. Mr. Sinners was formerly assistant manager, freight rates, and Mr. Baer was general freight agent. **R. M. Hampe** assistant general freight agent (divisions), named assistant manager, pricing (divisions). **H. M. Leary** and **W. L. Herman** named assistants to manager, pricing. Mr. Leary was assistant general freight agent and Mr. Herman was assistant to general freight agent. **R. S. Bryant,** traffic analyst, named assistant manager, marketing.

WESTERN PACIFIC.—Harold E. Meeker appointed executive assistant to the president, San Francisco. He was formerly manager of corporate planning, **Chesapeake & Ohio-Baltimore & Ohio.**

OBITUARY

Hugo V. Gamper, 65, retired general purchasing agent, **Illinois Central,** died Jan. 17 in Illinois Central Hospital, Chicago.

Robert E. Gunderson, vice president and general manager, **Gunderson Bros. Engineering Corp.,** a subsidiary of **FMC Corp.,** was killed Jan. 19 in an airplane crash at San Francisco.

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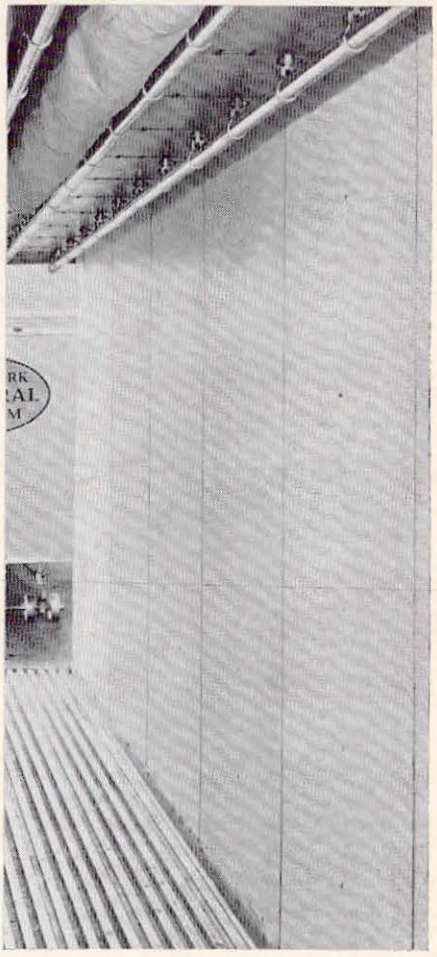

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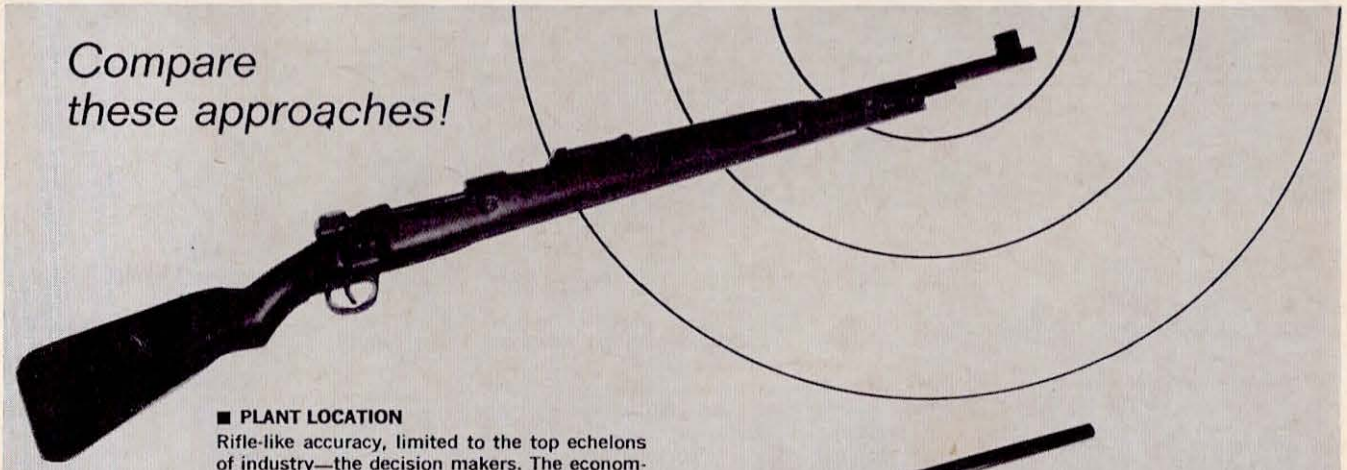

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■ **GENERAL BUSINESS MEDIA**
■ **NEWS WEEKLIES**
Shotgun effort. Lots of noise—partly on target but scattered here, there and everywhere in the wilds of expensive waste circulation.

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VIEWPOINT

The challenge of change . . .

"The winds of change are blowing hard across the land," a public speaker intoned—and a shipper in the audience was overheard to remark, dryly, "The railroads haven't yet felt the breeze."

That statement is, we submit, unfair and behind the times, though it contains a kernel of half-truth.

We concede that the marketing concept—that is, giving the customer what he needs, not what the operating department can most conveniently string together and call a train—has often been preached more in the executive suite than it has been practiced at the operating level.

Yet, implementation of this concept has produced such customer-oriented services as piggyback, unit trains, and auto-rack cars.

We blush for those railroad men who talk like towering statesmen of the business community when they pledge allegiance to the goal of an adequate car fleet—then get skittish when temporary loss of a tax incentive raises the price of progress.

But these same railroad men added 105,000 new and rebuilt cars to their fleet last year. What shipper did as much for his own customers, on such a slender profit margin?

Most of us know of at least one railroad chief executive still alive, although no longer kicking, who once swore that piggyback would come onto his property only over his dead body.

But that die-hard has long since repented, and today happily totes up his TOFC profits.

Comparatively recent history provides even more striking examples of resistance to change. Remember what was being said, only 30 years ago, about that costly toy, the diesel-electric locomotive?

But railroads did dieselize—and the economies of dieselization (and other modernization programs in which railroads have invested more than $20 billion in the last two decades) have helped keep the price of transportation down as the cost of living index soared.

So the question is not whether railroads have responded to the changing demands of the transportation marketplace; but whether they have done so with sufficient speed and imagination.

The answer has to be "no." But there are signs that the tempo of change is picking up. Consider what is happening on just one small railroad which was much in the news last week.

. . . and how one railroad has responded

Mile for mile, the Reading is probably as innovative as any railroad anywhere. Fresh evidence of this came when Reading President Charles Bertrand, addressing the Mid-West Shippers Advisory Board, announced the inauguration of a new, customer-oriented and profit-oriented service which the Reading calls "Bee-Line" (described on pp. 42 and 43 of this issue).

As interesting as the new service itself is the philosophy underlying it. As Mr. Bertrand put it:

"Finding new revenues requires new ways of looking at old problems. We won't find them if we let ourselves be tied to the traditional ways of doing things. We must free our thinking from the habits of the past.

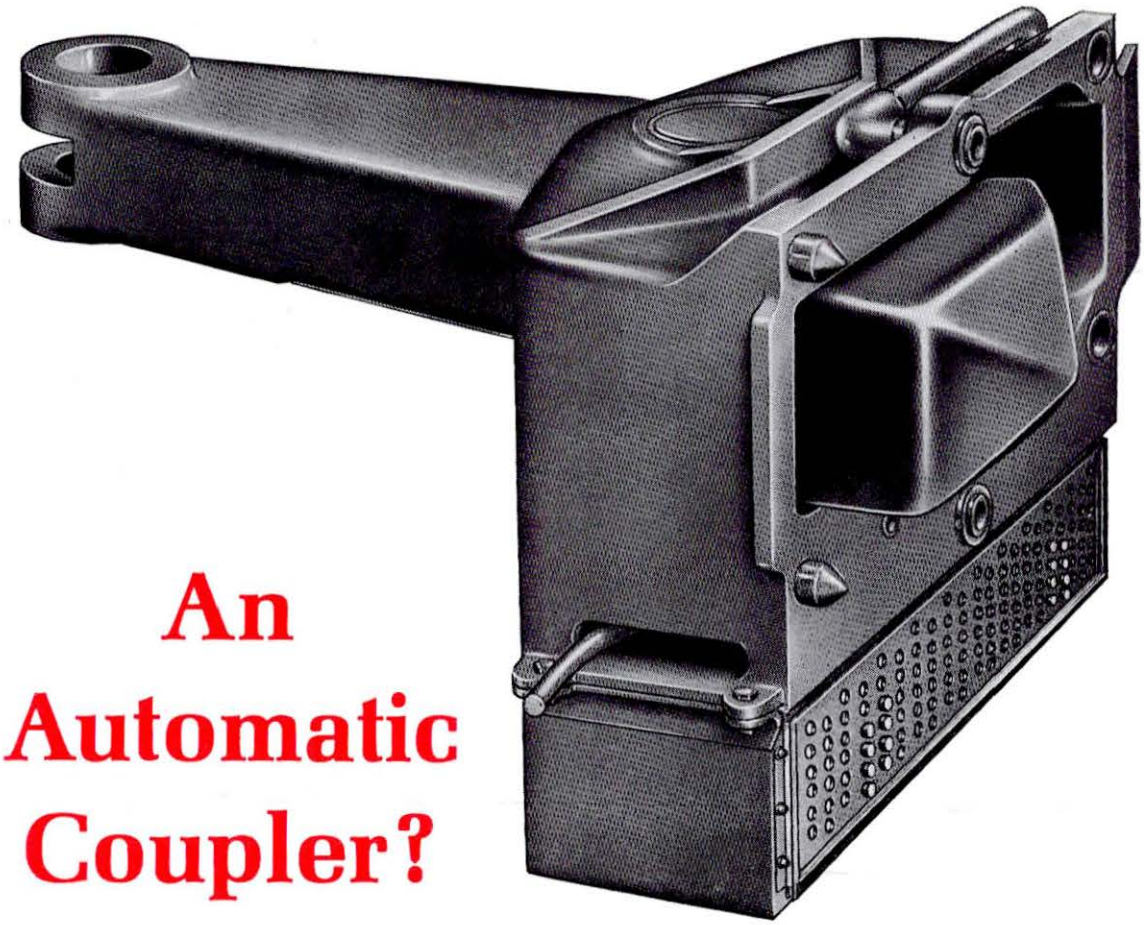
"I think there is a tendency for all of us, shippers and carriers alike, to think of the future in terms of the past. . . . We in the railroad industry, for example, know that we now handle about 43% of intercity freight tonnage. We think, therefore, that if the total tonnage moved increases, the railroad tonnage will also increase, since it will be a 43% slice of a bigger pie.

"This may be true, but it does not follow that our position will therefore be improved automatically. . . . I say that the railroad industry must find many kinds of imaginative breakthroughs to new ways of serving if the industry is to grow—and we need to grow if we are to survive. . . .

"As the nation grows, traditional patterns fall apart. Old sources of revenue dry up. There is little that can be done to protect our traffic against 'progress.' We might keep it for a while by going to the regulatory bodies and the courts for help, but this will only give us time to adjust to the changes.

"The only real solution is to go on with our 'creative prospecting' for better ways to be of service to you, our customers. . . ."

Charlie Bertrand wonders how the next generation, looking back, will assess the efforts of present-day managers not only to meet, but to anticipate, the challenge of change. It's a question that all of us —railroads, shippers and suppliers—can ponder with profit. And some unease.



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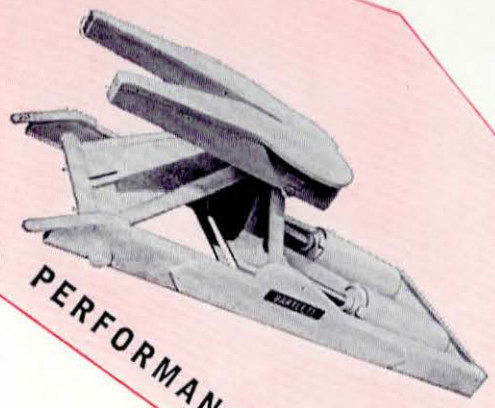

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